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ABSTRACT

Summaries are presented of the problems and issues of minimum competency testing which were discussed at four regional conferences for political and educational practitioners. The Education Commission of the States sponsored the conferences, but took no official position of support or opposition. Section 1 compares the legislative, practitioner, and community perspectives concerning the pressures for educational standards. Section 2 summarizes discussions concerned with selecting and defining the competencies to be measured, setting the standards, applying the results, assigning accountability, administering the testing program, and financing the program. Section 3 discusses the issues involved in implementing minimum competency testing programs. Section 4 presents abstracts of eleven background papers. The appendices include: (1) a copy of Henry M. Brickell's keynote speech which identifies seven questions for discussion and includes a checklist for policy formation; (2) information about the existing programs in Oregon, Pennsylvania, Florida, and Colorado; (3) an outline of the activities of 31 states; and (4) a list of the programs and participants of the four regional conferences. (CTM)

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Minimum Competency Testing

A Report of Four Regional Conferences

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During preparation, this report benefited greatly from suggestions by Henry M. Brickell, and critical review by, and suggestions from, Tommy Tomlinson and several ECS staff members.

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Introduction

Purpose of Conferences

The recent rapid movement by state legislatures and state boards of education to look at and in many instances to establish minimum competency standards for student promotion and/or high school graduation is a response to public concern about the quality of education in this country.

In response to requests from states for assistance in defining the issues and exploring alternative approaches in the setting of minimum competency standards, the Steering Committee of the Education Commission of the States (ECS) in March 1977 resolved to sponsor a series of conferences for political and education leaders and practitioners to promote the exchange of information about the many questions involved. Four regional workshops were planned for the fall of 1977 by ECS in cooperation with the National Institute of Education and the Carnegie Corporation of New York.

ECS has not taken a position supporting or opposing the setting of minimum competency standards or testing to measure them. The conference series was intended to respond to the needs of those already involved in a rapidly growing demand for some way to measure and to increase the skills that students are learning in elementary and secondary schools.

The Education Commission of the States invited representatives from its diverse constituency of governors, legislators, educational administrators and specialists from both state and local levels, classroom teachers, parent groups and students to the conferences to facilitate the sharing of plans, concerns and questions related to both the educational and political aspects of minimum competency testing. The Steering Committee's sense of the need for a forum was confirmed by the large number of participants whose expenses to attend were paid by state and local agencies. Participants included 517 persons from each of the 50 states, the Virgin Islands and Puerto Rico. The meetings were held in San Francisco, Sept. 29-Oct. 1; Boston, Oct. 13-15; Denver, Oct. 20-22; and Atlanta, Oct. 27-29, 1977.

Conference Format

Since the Education Commission of the States was created, in part, to further working relationships among governors, state legislators and educators for the improvement of education, the conferences were designed for representatives to mutually discuss issues and analyze alternatives. People involved in the technical aspects of minimum competency testing could learn from the interaction with the various publics interested in the issues, including those with responsibility for setting policy. Those just beginning to study minimum competency testing could appreciate the complexity of issues that must be addressed in implementing plans.

Formal presentations at the opening session provided a common focus for the participants. Included were:

- *Keynote address "Seven Key Notes on Minimal Competency Testing"*
  Henry M. Brickell, Director, Policy Studies in Education, posed seven basic questions related to minimum competency testing for participants to carefully answer at the state and local levels for the competency policy to be successful.

- *Background information by ECS staff members*
  Roy Forbes, Director, National Assessment of Educational Progress (NAEP) described the knowledge, skills and attitudes of young Americans as measured through objective reference questions in 10 areas of study designed and administered by NAEP to students 9, 13 and 17 years of age. The results have been used to report changes in performance in reading, writing and science.

  Chris Pipho, Associate Director, Department of Research and Information, reviewed the types of legislation and policy which presently guide minimum competency testing. The range of mandates vary widely in both intent and design.

- *Regional and state issues*
  A panel of people representing various legislative, educational and cultural viewpoints provided a regional and state perspective to conclude the formal sessions.

The remainder of the conference sessions were designed to facilitate discussions among participants in the following settings:

- Interstate groups where participants from several states could learn of plans and models in various stages of conceptualization and discuss mutual interests and concerns.

- Topical discussions where leaders shared information on setting standards, testing, finance, instructional management, guidelines for minimum competencies, and accountability issues.

- Intrastate planning sessions for each state's participants to share reactions and set direction for future planning in their state. These plans were presented at the closing luncheon meetings.

Format of the Report

This report is intended to reflect the proceedings of all four regional conferences. To the degree possible, the remarks, questions and suggestions of the 517 participants and presentors have been synthesized to show both general areas of consensus and those issues identified as needing further research and study. The latter was central to both the interstate and intrastate sharing sessions. The written summaries suggest that participants felt the need to broaden the discussion to include philosophical questions and statements about the goals of education generally in today's society, as well as issues tangential to the basic questions posed in the keynote address. Because the summaries of the approximately 100 group

discussions which serve as the basis for this report varied in format and detail, and because of inevitable repetition, this final report does not uniformly cover all individual comments or state recommendations.

Much of the background information important to an understanding of this conference report, such as the keynote address by Henry M. Brickell, is included in the appendices.

Within the body of the report, the first section, "Checking Perceptions," is organized to show that some gaps in communication and information among political and educational leaders are a cause of frustration. The conference was organized to provide decision makers with the opportunity to listen to several points of view in both formal panel discussions and interstate group discussions. Thus the content for this section comes from these two types of sessions.

Section 2, "Topical Issues," contains overviews of the six topical discussions which ran concurrently on Saturday mornings. The six issues were selected as organizers because many participants indicated an interest in the outcomes of those discussions. Related comments from the interstate discussions, and from responses to the seven questions posed by Brickell in the keynote address, are included in this section.

The third section of the report, "The Next Step," summarizes the intrastate meetings and final state reports. Recommendations for planning and action steps were generated during these final discussions.

Summaries of the background papers prepared for the conference and other articles and resources are included in the last section. Issues related to minimum competency testing are addressed by some of the scholars and practitioners in the field.

In the keynote speech (Appendix A), Henry M. Brickell described the scope of issues related to minimum competency testing, setting the tone for thoughtful discussion by the participants. The seven questions posed by Brickell were:

1. What competencies will you require?
2. How will you measure them?
3. When will you measure them?
4. How many minimums will you set?
5. How high will you set the minimums?
6. Will they be for schools or for students?
7. What will you do about the incompetent?

A checklist provided by Brickell is included in Appendix A, for readers who may wish to answer for themselves the questions posed in the address.

Appendix B provides an overview of state action in the area of minimum competency testing. By mid-November 1977, 31 states have taken action to implement some form of minimum competency programs. These programs are designed for divergent purposes: to evaluate school programs, to determine which students have learning problems and to set standards for grade promotion and graduation. Many states permit many decisions to be made at the local level while others have centralized the programs. The overviews of four state programs are included to

illustrate the variations in approach. An option not described, but chosen by at least 20 states, is to take no action at all.

A chart of state activity, included as Appendix C and prepared by Chris Pipho, summarizes the laws and policies of the states as of Nov. 15, 1977. The reader will find that under the label of minimum competency testing are programs which have very different intents and purposes.

Appendix D contains the roster of participants for each conference, and the names of panelists and discussion leaders who made presentations.

Section 1: Checking Perceptions

As the movement for minimum competency testing has gained momentum, it has sparked lively debate and more than a little controversy in many states. Section 1 is organized to present the perspective of various groups.

The Public Push for Standards

Statewide requirements for schools to identify minimum basic academic or life skills is an education issue which has high visibility in the political arena because the public has demanded it be so. Legislators at the conferences reminded educators that the state-imposed requirements constitute a response to their constituencies' legitimate interest in improving literacy. Evidence of the depth of the public feeling is found in the fact that all 50 states report some legislative or state board activity (study, planning, discussion, drafting, implementation) in the area of setting standards for schools or for students.

While the movement is still in the germinal stage, the symptoms indicating that something is wrong in the schoolhouse are being clearly reported to the statehouse by a composite of the following groups:

- *Parents*, who fear the children have been passed through the system without proper concern for developing skills necessary for success in adulthood.
- *Taxpayers*, who are talking accountability when they ask educators to explain why educational costs are rising while declines are reported in enrollment and test scores.
- *Employers*, who are disappointed in the pool of applicants available. Many employees need unusual job training because they have difficulty with such tasks as filling out forms, answering telephones and simple computation.
- *Officials* in institutions of higher learning, who are unhappy about the decline in Scholastic Aptitude Test (SAT) scores and the need for remedial courses for entering freshmen.
- *Back to the basics advocates and other critics of the schools,* who hope that this issue will help create support for restructuring the schools according to their particular goals.

Not all members of the public share this sense of alarm, although they may not be satisfied with the present education process. In addition to recognizing the societal changes which leave an impact on schools and children, evidence of stable or slight improvements in some areas of achievement have caused some people to conclude that achievement levels and student skills are no worse than they have ever been. For example, the National Assessment of Educational Progress has found mixed

achievement patterns among many subject areas, and the Preliminary SAT scores for high school juniors have remained stable during the same period that declines were reported in both the verbal and mathematical sections of the SAT.

Generally the public is asking, "What does the high school diploma mean?" The concern is that the present standards are not acceptable and do not reflect a common set of learning goals. The message is clear: find better ways to educate our youth. The ground swell for setting standards or minimums indicates that the public wants to help determine outcomes. In the minds of the citizens this is a very simple request. They will leave to the educators and policy makers the matter of how the task is to be accomplished, with the caveat that their credibility will rise or fall on the success with which they can respond to the challenge.

Assuming that the public concerns are legitimate, the question remains, will mandating standards insure instruction in the basic skills and improve the learning/teaching process? The answer must be not only technical but also political. Controversy arises not because people disagree on the need for accountability or higher levels of literacy. Rather, the issue is who should control the education decisions related to certification of students and schools and instruction in the basic skills. The common ground among the following views of legislators and practitioners must be defined as a starting point for resolving the issues.

The Legislative Perspective

While many legislators participated in the conference, the themes suggested below are built from the comments of those state representatives and senators who participated in the formal panel discussions.[1]

Teach the Basics

Legislators want to know what the educational institutions have been doing that allows so many students to complete 12 years of schooling without the skills needed to function successfully as adults. The growing public dissatisfaction is evidence that excuses for low productivity and abandonment of the basic goals of education will not be tolerated. The panelists suggested that a solid foundation in the basics should start with grade one and progressively build throughout the elementary and secondary schools. The status of elementary schools, which have the greatest capacity to facilitate skill development, according to one legislator, should be enhanced to attract the strongest teachers.

Desire for Quality Education

Legislative representatives were talking about more than the minimum when they spoke of their desire to enhance, not limit, the quality of education. While many states use the term "minimal" in their legislation, one legislator told educators to be wary of the word. He advised schools to set the standards high and to expect 90 percent of the students to do better. Concern was expressed that social promotions have not led to the development of quality, but rather to increased disruptions within the school and to larger numbers of students dropping out of school.

Scope of Instruction

Legislators also made reference to broadening the curricular experiences of students. Some students may need community based experiences rather than more drill to develop their basic skills. In contrast to some

[1]Legislative panelists are identified in Appendix D.

legislators' focus on the three Rs, one senator pointed to the declining level of citizen participation in public affairs and questioned teacher competence in civic education. Not only is too little time focused on actual participation, and too much time spent memorizing irrelevant facts in civics class, the concern about incompetent teaching of citizenship included criticism of the organization of the school as being too autocratically structured and therefore inconsistent with the participatory democracy which students are entering. Varying requests for instructional improvement that stimulate children and increase their involvement were made at all the conferences.

Fiscal Responsibility

Another common note among legislators was that of fiscal responsibility. Legislators, who feel that too much money is already expended for the outcomes achieved, advised educators not to expect scarce resources to be allotted for education programs unless results can be verified. Questioned also was the soundness of a financing system which encourages school districts to "maintain unsuccess" by providing additional dollars for each unsuccessful child in the district but denies dollars to schools which are too "successful." Another message was that while special funds may be provided on a short-term basis for districts to make the necessary preparations for minimum competency programs, schools should not expect additional monies on a permanent basis.

Use of Tests

Legislators expressed less consensus regarding the weight that test results should have in determining student placement and graduation although the concept of testing was considered an important tool for determining how effectively schools are working. One legislator spoke to the limitations of tests, indicating that what is observable may be far more relevant than what is discernible through a test. However, he reminded educators that we live in a test-conscious society where people look at the test results and, unfortunately, too often lose sight of the processes that precede it.

Working with the Public

Legislators, not overlooking the need to involve the public sector, stressed the importance of using the ideas of parents, students, and community leaders in defining standards and setting goals. Listening to what people want is the starting point, since, traditionally, educators have not had all the right answers. A Rhode Island legislator described a booklet developed in her state to elicit citizen input. *Schools and Skills* is a working document for both policy makers and practitioners to use in planning the state program.

The Practitioner Perspective. . .

Educators are telling the policy makers that they think the task of proficiency testing can be accomplished, but to do so will require speaking in specifics. Simply passing a law, even well intended, will not change the depth or scope of the problems which have held the attention of educators since the days of Socrates. Testing should not be an end in itself.

Because educators are reluctant to view minimum competency testing in a limited sense, the concept becomes more complicated once it enters the schoolhouse. For example, in Pennsylvania, where the idea was initiated inside the education system, the goal is long-range reform of the system itself. Through Project 81, 12

districts serve as models for developing a competency-based program directed toward the goal of a high school diploma that guarantees certain knowledge and abilities. At the end of five years (1981), the comprehensive plan that started with goals and objectives generated within the community, will include an instruction program built around specifically stated competencies. "Minimum" is not mentioned in the program description, and testing will be only one part of the evaluation process.

Such a plan contrasts significantly from the intent of legislation drafted in many states. Some of the legislative language — minimum, guarantee, all students, next year — is not readily acceptable to educators. Educators are more comfortable talking about long-range planning and an individual working toward his or her maximum potential. The consensus of practitioners regarding the oversimplicity of some existing legislation breaks down in further discussion of education goals and the proper implementation process. The circumstances and priorities of practitioners vary so greatly that there is no collective point of view. However, the skepticism about minimum competency testing and the capacity of the schools to constructively implement some of the mandates have found expression in the following themes:

The Mission of the Public Schools

During the last decade the schools have accepted a wide range of responsibilities which previously fell to other institutions. The task of educators now includes — in addition to the traditional subject areas — career education, consumer education, drugs, alcohol and sex education. In addition the schools have accepted responsibility for mainstreaming, implementing programs for the gifted and the handicapped, and expansion of extracurricular offerings. Many of the programs listed above have been mandated or encouraged by one or more levels of government.

At the same time, the power of the schools to hold students has improved, perhaps causing, in part, the present impetus for minimum competency testing.[2] The schools, particularly the urban high schools, serve a wider range of students with respect to learning style, talent and background than ever before. The emphasis on getting and keeping students in school, it is suggested, has resulted in the lowering of standards.

With respect to the discussion of minimum competency testing, educators are asking: "Which of the many tasks you ask us to accomplish deserve priority during the six hours that children are in school?" "Are you adding one more task or are you simply asking that we do a better job of the tasks assigned to us? What are the priorities?"

Does Minimum Competency Testing Make a Difference?

Teachers indicated that they know which students have learning problems before giving the test. The emphasis, in the minds of many, needs to be placed in finding better ways to help students and schools with problems overcome the deficiencies. Simply reacting to public pressure by instituting a test for a high school diploma will not get at the source of the problem. Many educators would like proof of the effectiveness of minimum competency testing programs to bring about the desired outcomes before

[2]A historical perspective of minimum competency testing is provided in Thomas Green, *Minimum Education Standards: A Systemic Approach*. This paper, prepared for the NIE/ECS conferences, is summarized in Section 4 and available upon request.

expending limited resources on implementing programs similar to those already proving unworkable.

Concern Over the Narrowness of Legislative Intent

Much of the legislation specifically mentions the basic skills of reading, writing and computing at minimum levels of proficiency and life skills, such as filling out forms, balancing checkbooks and reading labels. Concern was expressed that the curriculum would be robbed of much of its richness if disproportionate amounts of resources are deployed into teaching minimum skills. Educators often pointed out that only those things that can be measured may receive attention, stressing the result of too much emphasis on those skills which are easily tested may cause neglect of other important objectives.

System Readiness

Tying minimum competency testing to graduation requirements and/or teacher evaluations cannot be rushed, according to educators. Proficiency testing may demand the restructuring of many programs if it is to be defensible.[3] Making sure the curriculum matches the test, students know the expectations in time to prepare, and that a valid test, appropriate for competencies which must be specifically defined, will all take time. Enlightened legislators, according to educators, will be the ones who develop a familiarity with the technical problems to be addressed and allow sufficient time to make necessary adjustments.

Community Perspectives

An inconsistency of community response to programs is suggested in the varied reaction of several subpopulations. The content of this section is built, in part, from the remarks of community representatives who made presentations on the regional panels.[4]

Students and Parents

Throughout the conferences no district or state reported organized reaction against the philosophy of minimum competency testing. In Oregon, the first state to pass legislation, the first class to be affected by the new requirements will be graduated in 1978. Reaction appears mixed. Some students have indicated that they wish they had had the advantages provided by the requirements earlier. Some frustration has been expressed, however, by better students, that too much time is being expended on basic skills they already have mastered.

In general, parents' feelings are expected to parallel those of their children. In Florida, where members of the Class of 1979 face the denial of diplomas if they fail the state-mandated test for the third time, the Parent-Teachers Association (PTA) has passed a resolution requesting that the plan not be applied to 11th graders who may not have received instruction consistent with the test. Furthermore, community, church and parent groups have organized help sessions outside of the school day with some government funding to prepare students for the proficiency exam.

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[3]The legal theories related to this position enumerated in Merle McClung, "Competency Testing: Potential for Discrimination," *Clearinghouse Review*, Vol. 11, Sept. 1977, pp. 439-448. A summary is included in Section 4.

[4]Names of panelists are included in Appendix D.

Minority Groups

While there is a range of opinion in the minority community regarding minimum standards, some school districts are anticipating a reaction from groups who may sense discrimination from programs once they are implemented. Leaders in black and Spanish-surnamed communities have long recognized that the skills necessary for success in society were not being developed among minority populations. Pleased that others are beginning to share that concern, they hope that the schools will no longer have an excuse for not equipping all children with the basic survival skills. While their goal is the same as the legislators, community leaders warn that minority support can be expected to disappear if the movement becomes a system for rejecting students for high school diplomas. Based on the premise that students enter school with varying degrees of inequality, some feel that standards may demand far more from some children than others.

Another concern is whether the tests will allow for cultural differences. Some minority participants urged that testing programs be studied for cultural, social and linguistic bias, suggesting that normed tests that utilize white, middle-class standards will discriminate unfairly against groups who do not share those values. Minority group members fear that tracking of students and exclusion from opportunity may occur based on test scores.[5]

Minority participants did not speak with unanimity about social promotion. While some spoke of damage to minority students caused by passing them through the system, others offered contradictory evidence. A study completed of Mexican Americans, which showed their achievement to be below norm, reflected favorably on social promotion to the degree that the reading level among Mexican-American students in Texas, a state with a strong retention policy, was at the 4th-grade level while Mexican Americans in California, a state with more liberal policy toward promotion, read at the 8th-grade level.[6]

Minority participants encouraged educators to look for alternative approaches for achieving the worthwhile goal of improving skill development, based on the belief that if educators continue to use traditional means, minorities will not make it. More study in the areas of school climate and curriculum development was recommended for students with unconventional learning styles.

Special-Need Populations

Other groups are expected to have concerns about the impact of minimum competency testing on learning among special populations. Advocates for special education and handicapped children sense a potential unfair labeling of some children and advocates for gifted and talented students fear that resources will be drained from enriching curricular experiences to provide remediation for the marginal student.

A final group mentioned by educators is the highly mobile student population. The large percentage of the population who move annually as part of corporate, military, migrant and labor populations will have concern about transfer of records and phasing in and out of locally determined minimum competency standards.

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[5]Some of these concerns are explored through legal theories in McClung, "Competency Testing: Potential for Discrimination."

[6]For further information about this study, contact Roberto Segura, Sacramento State College, Sacramento, Calif.

Section 2: Topical Issues

The six topics into which this section is organized were presented at the conferences at concurrent sessions on Saturday mornings. The information presented under each heading is taken from the discussions of the presentors and participants in the sessions. Interfaced with that content are the related comments from the Friday interstate discussion summaries and suggested answers to the seven questions which Brickell challenged participants to answer throughout the conference.

Guidelines for Minimum Competencies

What Competencies?

Selecting competencies may be a tedious and time-consuming task, but a necessary one for communities interested in minimum competency testing. Brickell provided five choices for participants to ponder: basic skills, school subjects, life areas, basic skills applied in school subjects and basic skills applied in life areas. States, through legislation and policy, have selected primarily basic skills and/or school subjects, with only a few including life skills in the definition. While the application of basic skills within school subjects and life areas was an appealing goal for many participants, no one had clear answers about how such choices could be developed.

Participants found that there are many different ideas about what is wrong with schools and society. Individual tastes and judgments must be discussed and debated until there is agreement about those skills or competencies that are absolutely necessary. The minimum threshold would be defined by some to be the level below which students will have no options and cannot successfully operate in today's society when presented with the opportunity to do so.

Discussion designed to evoke ideas as to which of the competencies or skills should be developed in the classroom sometimes evolved into discussions of the goals of education generally. Some participants were surprised and at times disappointed at the lack of consensus regarding the answers to such questions as: "What are the definable skills which adults cannot live without?" "Which competencies should the school develop?" and "Which can they do best?" Most agreed that the discussion of and debate on the answers would be a healthy activity for any community.

Defining the Terms

There is no common vocabulary for discussing minimum competency testing. The word that caused the greatest confusion was "minimum" itself. While part of the confusion centered on semantic differences between "minimum" and "minimal," several participants felt that a different key word, or at least a broader definition of "minimum," was necessary to describe the skills needed to survive in contemporary society. A long list of substitutes for "minimum" can be developed by abstracting from state legislation and policy. Massachusetts, for example, has decided to use the

term "essential" to describe the state program. Other adjectives include "core" and "adequate." A well-received suggestion at all the conferences was to drop the word altogether and to simply refer to the concept as "competency testing."

Such differences reflect the fact that many diverse ideas are grouped under one label. However, if minimum competency testing is to accomplish anything, participants felt a common focus must be established and maintained at least at a state or local level so the people know what the goal is — as well as what it is not. The following skeletal definition is included as a point of reference for those who wish to develop individual statements:

> Minimum competency tests are constructed to measure the acquisition of competence or skills to or beyond a certain defined standard.

A more elaborate definition would require the answers to such questions as: Will competencies be defined in the affective/emotional domain as well as the cognitive/intellectual domain? Will the measurement focus on life skills or basic academic skills? What will be the nature of the tests? How broadly/narrowly should competencies be defined? The breadth of definitions for minimum competency testing is yet to be determined but, in general practice, the measurement has been limited to the cognitive domain and, within those parameters, to competencies somewhat ambiguously defined — but usually including skills in reading, computation and written communication.

Minimum competency testing is sometimes assumed to be some things which clearly it is not. Although there is some overlay between minimum competency testing and the movements described below, the distinctions are important to note.

Back to the basics

Minimum competency testing is not synonymous with the "back to the basics" movement. Minimum competency does not specify any instructional strategies, a given learning environment nor a return to former content. In contrast, many "back to the basics" advocates have strong feelings about discipline, dress codes, patriotism and the need to narrow the responsibility of schools — goals not necessarily shared by proponents of minimum competency testing. A testing program, for example, does not call for an end to open space, team teaching or new math. The commonality between the movements is found in the desire to define basics for everyone to learn.

Competency-based education

Competency-based education is a term which some participants used interchangeably with minimum competency testing. However, the two are distinct movements which only coincidentally use common words. Competency-based education prescribes a total learning system which necessitates restructuring the schools and education processes. Most proponents for the movement state that goals for learning should be structured around specific outcomes rather than through courses and subjects. Flexible use of time, increased individualization of instruction, specifically stated objectives and use of tests to diagnose individual need, evaluate program, and select appropriate learning activities for students are part of the philosophy. Like the "back to the basics" advocates, some

supporters of competency-based education hope that the force of minimum competency testing will increase interest in competency-based education generally.

Both movements involve the setting of standards and use of tests as a means of determining when performance is satisfactory. Minimum competency testing, in contrast, defines only minimums and does not specify a theory of learning, school organization or a process for competency development.

Competency-based teacher education

Training programs for teachers, often highly individualized, which emphasize field-centered instruction and the systematic planning of time and resources are characteristic of competency-based teacher education. Many of the programs are oriented to the development of competency-based instruction in the classroom setting and teacher accountability for competency development. This movement is distinguished from minimum competency testing in ways similar to those mentioned under competency-based education.

Accountability

"Accountability" has become a generic label for several specific programs intended to improve education through a process of defining goals and measuring performance in relation to those goals. Evaluation of programs is based in part on testing and determines what changes are necessary to promote student learning. While some participants spoke of minimum competency testing as another tool to achieve accountability, the strict definition of minimal competency testing does not necessarily lead to an accountability system. Minimum competency testing can be used for accountability purposes, but only in the limited sense of bringing achievement levels of students and/or schools to the minimum standards.

Life Skills vs. Basic Skills

The discussion leader advanced the following definition of minimum competency in the topical sessions on guidelines as a starting point for the discussion of selecting competencies: "Minimum competencies are the basic proficiencies in skills and knowledge needed to perform successfully in real life activities." That definition served as a departure for participants to suggest the following "schools of thought."

Pro "Basics"

The school skills of reading, writing and computing are clearly definable and necessary for life. It is better to concentrate on a few skills and to do well those things the school can do best — teach reading, writing, arithmetic and other academic subjects. The basics will be ignored as long as schools insist on humanizing education and teaching the whole child. Basic-skills advocates also question whether educators have really defined "life skills" and, if defined, whether the schools are equipped to deliver those skills if mandated to do so.

Pro "Life Skills"

Skills, *per se,* are of limited use if students do not see the relationship between the skills and daily life. Furthermore, learning to transfer

knowledge to real life situations may provide students with motivation to learn. While fuzzy about what should be included in the life skills areas, many suggest that the processes of learning (working in groups, expressing opinions, decision making, problem solving) are as important as the content. Some suggested that the skill of memorization, for example, is decreasing in importance with increasing dependence on computerization of information. Those interested in real life goals seem prepared to make more major changes in curriculum than those selecting the basics.

"Basic" vs. "Life" — an artificial distinction

Basic skills and life skills both have a place in the curriculum, and problems are created when too strong a distinction is made between the two. "What are the real differences," one layperson asked, "between the traditional academic skills of reading and such life skills as reading a ballot?" Proponents suggested that basic skills should be developed at the elementary level and the transfer of learning through the application of those skills to the real world stressed at the secondary level.

Skills for the future

Those who brought a future orientation to the discussion were asking which skills will be important in the year 2000? Will the needs be the same as today? Surviving in a technocratic society today may involve balancing checkbooks, but using a computer may be central to most everyone's life 20 years from now. Media literacy may be more useful than print literacy, and success may relate more closely to social than to cognitive skills. While no one can provide firm answers about the future, this dimension of the discussion reminded participants that the movement is only in its infancy, and the skills, basic or life, may become outdated rapidly.

Selection Processes

Competencies can be selected from a pool of many that are appropriate and worthy of attention. Several participants felt that their states should postpone test selection until they can agree on a clearer, more specific definition of which competencies should be the focus for instruction.

Participants described a variety of methods for selection of competencies, with the common denominator of the successful models appearing to be the active involvement of the public and students at the lowest possible level. A Minnesota participant described his experience in selecting competencies through a survey of successful members of the community. High on his composite list were such skills as gathering information, pencil and paper math, accepting responsibility, cultural awareness and comparative shopping.

Another participant shared a slide/tape presentation used with community groups to stimulate thinking about the types of skills and experiences his district hoped to include in the curriculum. Once the community could see that a diversity of goals and expectations existed, the process of priority setting could take place. Deciding which questions to ask influences the type of answers received. One participant asked his group to consider the difference between: "This item is important for all, some or few students" and "This item is important for all students, yes, no, maybe."

The distinction between the two questions centers on whether all students will learn the same competencies or have individual contracts.

Some states and districts are anticipating some discrepencies between the priorities of educators and noneducators. Many parents have expressed interest in the application of practical skills, while educators see the need for academic preparation. Parent views are often influenced by the talents and interests of their children. Teachers, similarly, are influenced by their personal teaching strengths and interests.

Often mentioned as part of the selection process was the need for adequate time, a clear definition of terms such as "basic," "necessary" and "adult" and the need to find the gaps in the curriculum as applied to the testing objectives before implementing a program. Those who start with selecting a test, it was suggested, were allowing the test developers, rather than the school and community, to determine competencies.

Setting Standards

While many leading educators expressed reservation about the advisability of setting minimums, the conference discussion, for the most part, assumed that standards of competency would be set. This starting point was often determined by the needs of participants who have been mandated to set standards at the state or local level.[7]

Establishing minimums is viewed by many as a first, but quite modest, step toward the acquisition of learned skills. The process generally involves two stages:

1. Setting standards of competency.
2. Designing tests to measure the acquisition of skills.

Additional steps in the process, such as the purpose for standards, types and levels of standards, and the circumstances in which they should be used, are political in nature and must be answered in the jurisdictions where the policies are developed. An analysis of legislation and policy shows that standards are used to determine who should graduate, be promoted, exit early from high school, receive extra help or be excused from specific courses. At the institutional level, standards may influence the type and scope of instruction, as well as levels of financial support.

How High Should the Standard Be?

Among the issues surrounding the setting of standards one of the most basic, yet elusive, is how high the standard should be. When Brickell raised this question with participants, he illustrated that the answer has both political and economic ramifications. On the political side, a standard that is so high that many students fail reflects poorly upon the school for the ill preparation of students. Yet if the standard is set low, patrons can complain that the school is not rigorous in its demands for quality. One teacher representative described this dilemma as a "no win" situation. Economically, the amount of money available for remediation will influence how idealistic or realistic a state or local district can be.

The ethical dimension of the question, "How high?" must also be considered because the future of many students will be directly affected by the setting of

[7]The implications of setting and not setting standards are explored in Paul Tractenberg, *Legal Implications of Statewide Pupil Performance Standards*. This paper, prepared for the NIE/ECS conferences, is summarized in Section 4 and available upon request.

standards. The consequences felt by all students — the hopeless, the marginal, the average and the bright — need to be the focus of any discussion of standards. Will the standard be used unfairly as a punitive device? Is there a community commitment to provide the necessary resources to help students reach the standard? Does the standard demand too much of some and nothing of others? How many competent students will not be certified? Conversely, how many incompetents will be certified?

However, the discussions revealed that the question of how high the standard should be is answered routinely throughout the country with varying degrees of sophistication and rigor. Local districts, which have decided they can afford to aim high, include one demanding a C-minus average for high school graduation and another in which policies result in the retention of 20 percent of the student body in both elementary and secondary schools. Such examples are rare. More common is the report that such failure rates would be unacceptable within communities for either economic or political reasons.

The process for selecting the cut-off point is a key to its acceptability. Several variations of a consensus model for building an assessment tool are gaining popularity. A panel of experts, community representatives, etc., are selected to judge which items should be included as measures of learning. Items can be rated for technical validity, acceptable level of difficulty and appropriateness for the objectives to be met. A problem occurs, however, if there is no agreement among panel members, leaving the practitioner with no criteria for selecting standards.

A second method of setting a standard is looking at the performance of individuals or groups in order to pick a norm. Brickell suggested a "minimally competent adult" might be tested and used as a standard for performance. One test that is based on this concept is the General Education Development exam which has a cutoff established through the performance of high school seniors on the examination.

Testing experts at the conference emphasized two points for laypersons to remember when trying to determine standards for level of mastery.

1. No formula exists for objectively selecting the "notch" indicating mastery or need for remediation. In the end, some individual or group must subjectively draw a line they feel to be defensible. Dr. Gene Glass, University of Colorado, quoted by some participants as an expert in this field, has stated that any standard based on an absolute level of performance on exercises is meaningless.[8]

2. Setting standards can not be viewed as a one step task. Because the process is a subjective one, evaluation of the standard through field testing and rewriting is necessary to assure that the standard reflects goals as closely as possible. Furthermore, it will be necessary to reconsider that standard periodically to insure that it is consistent with changes in community expectations and needs. Thus the process of setting standards must be ongoing.

Since it is hard to defend any one percentage point as the point of proficiency, flexibility in the standard-setting process has been provided in many communities. Students who fall a point or two short on an important exam are quick to dispute the arbitrariness of a cut-off point. One method of handling challenges, when they

[8]Gene Glass, *Standards and Criteria,* An Occasional Paper, published by the Center for Evaluation, Western Michigan University. A short summary appears in Section 4.

come, is through the creation of a "hardship panel" which can make judgments about the student's ability beyond the test.

A second system is to include teacher opinion and/or records of student work to complement the test score. Recommendations for or against student promotion can be an additional piece of information to add to the proficiency test score. Many participants felt strongly that no single score should determine an individual's fitness for promotion or graduation.

How Many Minimums Will You Set?

"One minimum or many?" Brickell posed this question as he described for participants the wide range of abilities and learning patterns that are found in the schools. At one end of the continuum of answers to that question would be school systems which have established one standard for all students to meet. At the other end would be schools with a set of minimums for each student or each school, individually negotiated between family and school, or between school and board of education. The latter model, perhaps ideal, is not very manageable. The former would not be very helpful to many students, with some finding the single standard impossible to reach, others finding it ludicrously easy. In reality, it was reported that most plans utilize the single standard and concentrate the effort on increasing or at least testing the performance of the marginal student. The reliance on a single standard prompted the question at the Boston meeting: "Will the assurance of eighth-grade skills enhance the credibility of the high school diploma?"

The states and local districts have dealt with the issue of multiple standards most directly with special education students. Some have chosen to excuse handicapped students from the test while others have provided them a modified form of the test, or provided special assistance for passing a test which is uniformly administered. For example, Maryland excuses students from the proficiency test if they cannot read 10 percent of the items. Others feel that if a student is expected to be self-sufficient as an adult, then the basic or survival skills are needed and should be provided and tested by the school.

Englewood, Colo., one district attempting to move toward multiple layers of competencies, has set a lowest level as necessary for graduation, but other layers are used as goals for students with particular career and life ambitions. Some states and districts feel that the Individual Educational Programs (IEP) which are required for special education students (by P.L. 94-142) would be an ideal method of setting proficiency levels for all students if districts could afford the cost of setting up and maintaining the necessary program.

Having more than one standard for all students is an alternative which is widely practiced. Oregon, like most states, requires the traditional set of expectations: types of courses, numbers of credit units, mandatory attendance and grade-point averages which are based on amounts of time which students spend in school. To this has been added a proficiency or outcome-based expectation, which asks the students to show skill development not necessarily related to specific courses. In contrast, two states, California and Florida, have provided students with the option of leaving school upon the successful completion of a test of minimum competency.

Who Sets the Standard?

The question of the proper role of various levels of government in the issue of setting standards received as much attention as any at the conferences. Participants found themselves in agreement with the statement by HEW Secretary Joseph A. Califano Jr. that local and state approaches to minimum competency testing are more appropriate than state and national programs.[9]

[9]Joseph A. Califano Jr. in an address before the College Entrance Examination Board Annual Meeting, San Francisco, Calif., Oct. 24, 1977. A summary appears in Section 4. Copies are available from HEW.

A generalization expressed in a variety of forms is that the higher the level at which decisions are made, the more paper work and problems local decision makers can anticipate. Striking a proper balance between state and local control, and between strong legislation and flexible policy, is difficult and debatable. The following points were brought up by persons on either side of the state or local control issue:

State Control	Local Control
1. Total local control will lead to meaningless tests.	1. Local needs and priorities vary; therefore, it is difficult to set a single standard for the entire state.
2. Lack of common expectations will emerge from districts.	2. For the program to be effective, the local board, community and teacher need to feel ownership of the project.
3. An age of high mobility at both pre- and postgraduate levels requires uniformity of testing.	3. Local boards are ultimately accountable and thus should control local testing programs.
4. If the process is left entirely in the hands of educators, it will remain suspect.	4. Policies, as opposed to laws, are flexible and can be easily changed if necessary.
5. Strong legislation is necessary to stimulate change.	5. Centralization of control will not solve the technical problems.

Much support was expressed for state-established procedures and policies which allow localities to set and implement local standards. Striking the optimum balance between state mandates and local control will be determined in part by the philosophy, priorities, needs and available resources within each state.

The importance of local ownership of the concept was emphasized at all four conferences. States and districts have worked to develop these in various ways. Kentucky, at the initiative of the state department of education, organized a 700-member task force to serve on 33 committees to set priorities. Proficiency testing emerged as a high priority, with a large force of people interested and available to work on the concept in local communities. Maine, while operating under legislative mandate, has a similar procedure involving as many as 50 organizations throughout the state in the process of selecting objectives.

Instructional Management

Although many state laws and policies do not specify an instruction component as part of the minimum competency testing program, many participants felt that instruction reform may be a positive change that emerges with the movement. As a starting point for reform, well-defined competencies can provide a clear set of goals for guiding curriculum development.

However, in discussing the proportion of time and resources that should be directed toward teaching and testing the minimum, participants often mentioned that larger education goals and a quest for excellence are more appropriate guides for the development of curriculum and instruction strategies. Concern was expressed that overzealous approaches to teaching and testing the minimum may

encourage mediocrity. Since many of the pencil and paper tests presently in use are adequate to measure low-level cognitive skills, but are not valid to evaluate such instruction objectives as ethical development, higher levels of thinking, speaking or even writing (some tests rate students' writing merely by asking them to read and proof), they cannot serve as a guide for the total program. Generally, participants spoke in favor of a balanced, rich curriculum that includes the basics but also provides for creativity, encourages independent thinking, recognizes the importance of such affective goals as group participation and self-esteem, the need for vocational training for some students, and the value of art, music, physical education and the humanities.

Remediation, Social Promotion or Retention?

The Brickell question, "What will you do with the incompetent?" caused many discussion groups to consider remediation, differentiated diplomas, withholding diplomas and retention as options for treatment. Among the choices, remediation appeared to be the most common and widely accepted answer. Unfortunately, ideas for remediating students or reforming schools were not as specific as many wished. Educators indicated that they have been trying to help low-achieving students all along, but need help in identifying more effective remedial strategies and programs and acquiring specialized training in diagnosing learning difficulties. Too often students are given extra help, but the resulting instruction is more of the same for a group of students with very different needs and learning styles, some of which may be unknown to the teacher. Several local and state agencies will be working to improve and redesign programs for students identified as needing remediation.

Some participants suggested that minimum competency testing programs have potential to manage instruction by limiting social promotion. Members of the public favoring the retention of students whose work is below par believe that the practice serves as a motivational device, prevents disruptions in the classroom and provides a needed opportunity to correct deficiencies. Those who share this philosophy believe that students should be expected to work at a grade level and progress academically in relationship to grade-level expectations.

Educators at the conference pointed out that grade level is only an average — a reference point at which half the students of a given age can be expected to perform above and half below. The uneven patterns and rates of cognitive, social and physical development in children make it difficult to determine whether an individual not working to grade level might benefit most from retention or promotion. Many administrators are reluctant to retain students within present school structure without clear research evidence to support the practice.

Those who believe that students fail more by failing suggested that a solution to the problems associated with retention is to move away from the ingrained concept of specified age and grade levels toward a learning environment that recognizes variation in development stages, provides multiple opportunities to learn the identified skills, yet allows students to socialize with members of their own age group.

Suggested Instructional Reforms

Strong feeling was expressed that competency development and testing should not simply be tacked onto the curriculum to be viewed by students and teachers alike

as an extraneous task. Recognizing this concern, many districts are completing curriculum studies to determine what changes are needed to facilitate competency development and how those changes can be integrated into the ongoing instructional program. One district in Delaware began by developing learning packets for minimum competencies and transposing the existing program onto a model designed to find out where improvements were needed. Learning theory, instructional skills and a management plan will guide any modifications that they make in the curriculum. Some of the participant ideas for instructional reform listed below were suggested specifically for students with low skills, but have the potential to improve instruction for all students.

Early identification of learning problems

Many districts are operating on the philosophy that it is sensible and less expensive to identify needs before they become problems or, at the least, before they become incurable. Recognizing that the elementary schools have a better capacity than the secondary to teach the basic skills, some states are starting to identify needs in the primary grades or even through the early childhood education programs. Through diagnostic/prescriptive teaching and continuous progress programs based on what is known about the developmental stages of children, students can progress from one skill to another as their abilities allow. Teachers coordinate learning activities directed at specific student needs through a systematic management of materials and student records.

Teaching students how to take tests

Test taking is an important school skill. Since larger numbers of students are predicted to continue some form of formal education in adult life, learning how to do one's best on a test is a valid instruction objective. For some students, passing a test which selects for opportunity may become a most important end in itself; for the test-anxious students, learning to perform successfully on tests may create new options.

Community-based instruction

Working on the assumption that more of the same is not the answer, many districts are making wider use of the community as a source of curriculum for students not achieving in the classroom. Work-study and other experiences outside the school can extend the teachers' repertoire of strategies, particularly in areas requiring application of life skills where learning may be best facilitated through real life experiences that can then be discussed in the classroom. Businesses, governmental agencies, hospitals and service organizations can become part of the instruction activities through providing additional expertise and opportunities for students to learn by doing.

Student advisee system

One example of the trend toward more individualized attention for the students is a teacher-student advisee system. Georgia school districts piloting competency programs are developing a system to provide personalized and consistent counseling regarding skill development, courses and sources of special help. Each teacher is responsible for assisting 20 students to plan a course of study during their high school careers.

Parental involvement

Teachers are looking for new ways to involve parents in the learning experiences of their children. Some districts are providing incentives for parents to attend PTA meetings, serve in advisory capacities and visit school more often. Other schools are looking at the possibility of contracts with parents specifying what the school and family will do to help the student learn.

Improving the relationship between testing and instruction

Presently, teachers are using tests primarily to see how students are doing — without considering that tests can also show how the program is working, whether the goals are suitable or even if the test itself is appropriate. Recognizing that many tests are easy to administer but difficult to translate into learning strategies, participants spoke of the need to improve the linkage between goals, instruction and testing. Optimally, tests would be used to diagnose need, select appropriate learning experiences and, in the process, provide the necessary feedback to make tests an integral part of the instruction program.

While tests should reflect, not determine, the goals of the curriculum, it was suggested that teachers can use the test itself as a starting point for improving instruction by determining why students do not do well on tests. By analyzing a test, teachers can determine where students have gone wrong, debate whether particular items are worth teaching and share alternative strategies which might be used to develop the skill necessary to answer a similar item correctly.

Evaluation of elective courses

Teachers are being asked to account for the skill development in courses where it was once acceptable to close the door and "do your own thing." Districts are working to insure a commonality of experiences, often by tightening requirements and/or increasing units for graduation. A corollary to this trend is the establishment of required courses with provisions for ability grouping within. Other districts, concerned that the elimination of electives would prevent the self-selection of students into courses, are working instead to infuse such basics as critical reading and writing into all electives.

Competency-Based Instruction

Proponents of competency-based education endorse many of the suggestions for reform listed above, but advocate a more drastic reorganization of schools to facilitate the competency attainment of students at all ability levels throughout the curriculum rather than for a narrowly conceived set of minimums. Based on evidence that present instruction has too little relationship to adult life roles (i.e., producer, consumer, friend, family member), they suggest a school structure designed to enhance the ability of students to perform more successfully those competencies demanded in their life roles once they leave school. Within the theoretical model discussed at some of the conferences, competencies (the ability to perform successfully the patterned activities that constitute life roles) are distinguished from capacities (basic skills which serve as the building blocks of com-

petencies).[10] A sequential and systematic instruction program would recognize and build around the complex interrelationships of both capacities and competencies. Within the framework of the theoretical model, those state and local agencies that provide positive answers to the following questions can be classified as moving toward the implementation of a competency-based education program:

- Are the goals clearly and specifically defined so they can be understood by the student, teacher and other interested parties?
- Are multiple opportunities provided for students to achieve and demonstrate competency?
- Is there a diversity of learning opportunities, including off-campus experiences, which allow students to attain the desired outcomes?
- Is the attainment of outcome goals by students superordinate to student role expectations (i.e., completion of assignments, attendance)?
- Are the tests locally determined and specifically referenced to the goals and instruction in basic skills and life-role competencies?

The practices outlined in the proposed model demand far-reaching and sometimes debatable changes at the elementary and particularly the secondary level, and adaptation of the theoretical model will no doubt take place through the process of critical evaluation by both critics and proponents. Following is a summary of some of the anticipated changes examined by participants — changes in emphasis and direction from the conventional high school program:

- Instruction will be organized in more flexible blocks of time than semesters and class periods to provide multiple opportunities for skill development.
- Courses organized by content will be redesigned to allow (sometimes through an interdisciplinary focus) individual students and outcome goals to be the center of the instruction.
- Students will take fewer pencil and paper tests and participate more often in simulations or real-life experiences, which would require the use of problem-solving and decision-making skills.
- Pupil progress will be reported not in courses completed or by letter grades, but through the measurement of the competencies attained.
- Self-contained classes will be modified to provide for more appropriate and flexible grouping of students.
- The role of the teachers will be more specialized, less custodial and supervisory and determined less by content specialties. More time will be required for planning, facilitating, evaluating, prescribing and record keeping.
- Student tenure in school will be determined less by years and courses completed and more through the demonstrated attainment of a set of minimums and maximums suited to the student goals, abilities and interests.

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[10] A theoretical model of competency-based education is provided in Bill Spady, "A BandWagon in Search of a Definition," *Educational Researcher*, Vol. 6, No. 1 (January 1977) pp. 9-14. A summary of the article is provided in Section 4.

Many reforms suggested by competency-based education advocates at the conferences will not happen on a large scale in the near future. The attitudes and values of teachers and parents must undergo drastic change for such an approach to be implemented in the classroom. However, the competency-based approach was generally well received by many participants looking for strategies for instruction reform. States identified as moving toward the development of competency-based instruction include Oregon, Pennsylvania, Maryland and Michigan.

Accountability

The discussions proved that accountability is multi-faceted. What is it? Who should be held accountable? What is the goal of accountability? Is it to identify poor students? Poor educators? Too often, it was pointed out, accountability is viewed in too narrow a sense — as something to make teachers teach or students learn.[11] Some participants pressed their discussion groups to look beyond the professional educators and students in defining a system of accountability, feeling that policy makers should be responsive to local needs and priorities, taxpayers should be tasked to fund education at adequate levels and parents should take an interest in children's lessons and attendance patterns. When a state begins to evaluate why schools and students are not doing better the need for a broader sharing of responsibility for improvement is important, and this need may not be met by minimum competency measures alone.

Accountability issues are inherent in Brickell's question of whether standards should be designed to schools or students. This question was focused, in accountability terms, in discussion groups and teacher accountability sessions in which reasons were advanced to support testing to measure either students or schools. The major arguments have been categorized in the following manner:

Participant arguments to support student measurement	Participant arguments to support school measurement (systems, administrative and/or teachers):
1. Meaning should be returned to the high school diploma. The significant minority who are unwilling or unable to meet the standards should not receive the same awards as those who do.	1. Schools have a responsibility to provide adequate instruction in basic skills. If the programs are ineffective they must be identified, changed or eliminated.
2. Many students are slipping through the system without attaining competencies. Tests will help to identify these students and do something about their needs. Retaining them for additional time or placing them in special programs could be a result of testing.	2. The delivery of effective programs is the responsibility of administrators and teachers. If personnel do not have the skills necessary to deliver a program, they must be identified and either retrained or replaced by qualified personnel.
3. Students need to take more responsibility for learning. Tests can show the student that he must put forth more effort if he does not meet the standard.	3. Teachers will take more responsibility for progress of students if they know that they are judged by the progress that students make in their classrooms.

[11]This argument is explored in Art Wise, *A Critique of "Minimal Competency Testing."* This paper, prepared for the NIE/ECS Workshops, is summarized in Chapter 4 and available upon request.

The discussion of these various considerations indicated the danger of measuring either of these to the exclusion of the other, as the unfair labeling of both groups is a possible outcome.[12] The following statements of concerns, abstracted from participant discussion, should be considered in determining a proper balance.

Student Concerns

Some participants felt that many state and local decisions did not reflect sufficient thought about the impact of high school proficiency testing on the lives of many students. Concern ranged from the thought that it is too late to impose graduation requirements on the older children, to prejudicing the employment opportunities of those who don't receive the most prestigious diplomas. A single test to determine whether a student receives or does not receive a high school diploma may be unfair to some students, particularly if the standard is imposed late in the academic career. Students who feel they are the victims of a poor education can argue that it is wrong to deny a diploma when the curriculum or instruction methodology was insufficient for him or her to learn. Such arguments may precipitate more Peter Doe cases, demanding that the school share responsibility for the incompetence identified through the test.

Potential problems associated with differentiated diplomas or a combination of diplomas and attendance certificates include the danger of unfair interpretation of some certificates in the community. Sympathy was expressed for the hard-working students who expend great effort yet do not pass the exam, leaving an indelible mark on their futures. Such students may have many positive qualities which a certificate of attendance, offered as a substitute may not suggest to potential employers. Many students apparently share this concern. For example, in Florida, some students who are in danger of not passing the Functional Literacy Test are considering dropping out of school as a less stigmatizing alternative.

Representatives from Florida and Arizona, two states where graduation and grade-to-grade promotion are at stake, reported that many students are trying harder. However, the programs have not been implemented long enough to see if the actual performance of those students will improve with the change in attitude. One administrator from West Virginia has observed pressure on students to pass tests which he felt was not entirely healthy for either teachers or students.

School Concerns

Conference attendees within the education system saw the potential for schools and individuals within school systems to be unfairly labeled. Among the possible effects of labeling, some local officials suggested that labeling a school or district "poor" might cause an adverse effect upon the housing patterns, property values and support for bond issues.

Administrators showed concern about how scores are reported, stressing that scores may not reflect the quality of instruction. Some suggested that those districts with high scores are always quick to publicize high achievement (and perhaps accept undeserved credit), leaving those with low scores to explain the low achievement which may be more closely explained by socioeconomic factors or changing enrollment patterns than poor instruction.

Some school board members were sensitive about accepting responsibility for testing programs over which they have little or no control. Even though competencies and tests may have been developed at the state level, some feel that individu-

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[12]The possible effects of minimum competency testing on students, teachers and administrators are explored in E.W. Kelly, *The Politics of Proficiency*. This paper, prepared for the NIE/ECS conferences, is summarized in Section 4 and available upon request.

als with complaints will look to the local board for redress. Others, however, suggest that a well-planned minimum competency testing program could be evidence that the school had done everything possible to provide for instruction. Documentation of adequate instruction programs and relative growth of students could be established to defend schools against civil cases.

Teacher Concerns

Teacher accountability was discussed at great length in many groups. As the closest link in the education system to the student, the classroom teachers felt they are most vulnerable to being singled out for accountability purposes. Teachers reminded participants of the many custodial functions and socialization roles that detract from instruction duties. Community expectations, students who hold part- and full-time outside jobs, and the type of materials provided, are all factors to consider when looking at student performance in relation to individual teachers.

Individual teacher accountability for lack of student growth will not be easy to measure. An National Education Association (NEA) representative did suggest that it will be possible to document a teacher's ability by looking at the relative growth of all students over a period of many years. She warned, however, that placing the accountability pressure on a teacher for making students reach the minimum may very well produce the minimum and little more.

Some teachers are responsible for the development of programs within their districts. In Westside School District in Omaha, Neb., teachers took the initiative for organizing a proficiency exam and have received praise from the public for their efforts. Many who feel there is a place for minimum competency testing do not want it used as a basis for evaluating individual teachers.

Reports of change in teacher behavior are mixed. An Arizona superintendent felt his teachers are spending less time at their desks and more time working with students who must now read at sixth-grade levels to graduate from the eighth grade. In contrast, a Denver administrator saw little impact on teachers as a result of competency testing since a student who fails the test sees a counselor for assignment to a remedial program.

Responsibility for low achievement, it was generally agreed, must be shared. To place the total burden on any one group will only produce hostility and ignore other deficiencies that demand attention. Similarly, many expressed the thought that tying either graduation requirements or teacher evaluation too quickly to a test would endanger the effective implementation of the program. In the larger sense, participants feel that a total system of accountability will need measures that cover the activities of all agencies and individuals who share in the responsibility for education.

Testing

Why Test?

The purpose for testing will determine the type of tests selected. A test to determine minimum competency generally looks very different from those administered for career counseling or college admission. A test to evaluate and diagnose the needs of an individual student are different from a test to evaluate the performance of a school's program. At the conferences, the type most often discussed for measuring minimum competency was the criterion-referenced test, which has been designed to report what a student can or cannot do as stated in a specific objective. While there appears to be no emerging pattern for state or local assess-

ment programs, norm-referenced tests which indicate the rank order position of a student's score in relation to others who have taken the test, remain a part of many state assessment programs. Generally, the development and administration of tests of minimum competency are separate from the state assessment plans.

A wide range of values was reflected in discussions about the purpose of testing. Some noneducators, perhaps reflecting on personal experiences in school, seemed ready to believe that tests motivate students to work harder and learn more. Educators expressed less confidence in the power of tests to motivate children, particularly those most in need of help. By high school, many students, out of frustration, have such strong feelings against tests that they are unwilling to put forth their best efforts in writing exams. Educators at the conferences preferred to speak of tests in terms of evaluating programs, diagnosing the need for remediation and, far less often, as a punitive device to make students learn. Generally, participants agreed that tests should supplement, not replace, human judgments about children's motivational needs.

Gary, Ind. reported that a significantly higher number of students from public schools have been passing the steel mills' apprenticeship program exam with the advent of competency testing in its public school system. The report also indicated, however, that there had been little impact on the 10 percent of students at the very bottom.

How to Measure

Four choices were provided by Brickell for measuring competency. The range included actual performance, simulated performance, school products and performance on paper and pencil tests. Participants generally concurred regarding the advantages of performance or application types of tests but indicated that pencil and paper are most commonly used because of time and cost factors.

Many participants hope to avoid too strong a reliance on paper and pencil tests because the technology of testing is presently too limited to adequately measure many objectives included in the curriculum. Participants used such terms and descriptions as "too elementary," "too quantitative" and "imprecise" to signal the need for more efficient and effective measurement. Tests should not be eliminated but used with caution while research in more effective methods is conducted.

One system in Massachusetts completed a study documenting that students had learned traditional school skills, but needed work in the area of transferring or applying of those skills to everyday life. Thus, they are looking for assessment tools that will help them to diagnose the deficiencies in that area. Development expense and time-consuming scoring procedures prevent more people from working toward the goal this district has undertaken.

Test Construction

Some of the following concerns emerged at the conference concerning test construction.

Selection of items

Evaluators are constantly looking for new sources of test items. The items that are easy to write, and therefore most available, are those asking for recall of knowledge. Questions that measure student ability to analyze and synthesize are much more difficult to develop, but in high

demand. Though the present technology is comparatively crude, that was not considered to be an excuse for not trying to measure all levels of thinking. Evaluators are optimistic that given sufficient time and effort, these difficulties will be overcome.

A matrix can be constructed to aid in selection of items. By placing course content on one axis and levels of thinking on the other, the chart can be used to identify areas of omission and areas of overload.

While a diverse sample of items is presently in the public domain, evaluation specialists are looking for items that also have information which relate items to objectives. The National Assessment of Educational Progress has been one primary source of objective-referenced items for use in state and local assessment.

Curricular validity

Making sure that the knowledge and skills being tested are contained in the curriculum is a persistent issue. The process of establishing curricular validity particularly concerns local curriculum people in states where needs and standards have been determined at the state level.

Amount of testing

Criterion-referenced tests, when used for diagnostic purposes, are generally longer than norm-referenced tests. If only one or two items are provided to assess given objectives, it may be difficult to predict who needs remediation or to use the information for promotion or graduation purposes. Finding out how long it will take students to answer a given item may influence the type as well as the number of items included in the test.

Because some of the tests are lengthy and require time away from instruction, many would like to see one testing program designed to meet all requirements including Title 1 of the Federal Elementary and Secondary Education Act state achievement tests, etc. where possible. For example, one local Iowa district reported that parts of 18 days are presently required for the testing of students, apart from tests to determine minimum competency. The other side of the argument is that such a multipurpose test would be very difficult to build.

Changes in curriculum content

The changes in all fields of knowledge as well as changes in emphasis occasionally frustrate test builders as they try to anticipate the future directions. For example, many schools are in the process of teaching metric concepts and use of hand calculators. Decision makers will need to consider whether or not to include such areas as necessary for minimum competency in adulthood.

Test security

In states and districts with established testing programs, administrators are concerned that student familiarity with the instrument may give some students an unfair advantage over others. Once a test has been administered, security problems increase, particularly when copy machines are easily accessible. Florida has instituted security measures

for the statewide Functional Literacy Exam by preparing three forms of the test and changing 20 percent of the items in each test each year.

The creation of a large bank of test items, which allow for interactive testing, is an expensive but successful answer to some test security problems. With use of a computer, an appropriate but different set of items can be pulled for each student.

The security of tests of minimum competency has been challenged by parents who feel they have a right to see the tests that determine if their children will graduate or be promoted, and from teachers who feel that an analysis of the items a student missed is necessary to provide appropriate remediation.

Make the test or buy the test?

The decision to develop a test locally or buy a commercially prepared one appears to be a widely discussed topic within many states and districts. It is generally agreed that the nearer to the local level the test can be developed, the more ownership will emerge — as well as more successful outcomes on the test. Teachers also seem to place more credibility in locally developed tests.

In contrast, published tests can usually be expected to reflect sound principles of construction because of expertise not always available at the local level. Such expertise is used to validate the items and to revise and pilot the product prior to distribution.

Tests available for national use do not always transfer neatly into regional needs. A participant from the Southeast, for example, found that children in her state had difficulty with tests in which children were asked to read Spanish surnames, use a map of Los Angeles and understand the meaning of the word "toboggan" (most students thought it was a covering for the head). Some companies furnish the consultants necessary to help a state adapt such a test to its region. Some participants spoke of some dangers associated with commercial testing programs that they felt had been adopted in such a way that the tests were leading, not following, the curriculum.

Those districts that had worked to develop tests at the local level found that writing good test items is a fine art. Many teachers have little preparation in evaluation and find it difficult, for example, to select good distractors (appropriate wrong answers). Districts reported a variety of experiences in using teachers to generate items and construct tests. Those districts that approached the test development by collecting two items from each sixth grade teacher were disappointed in the results. However, one district reported a successful experience through asking teachers to determine the type of content and skills to be covered and described in the curricular goals. A smaller number of teachers who had demonstrated an ability to write questions were then selected to write the items that related to the intended objectives.

Some states and districts are choosing a middle ground in which teachers select items that have been previously validated. Teachers survey a pool of items from a source such as the National Assessment of Educational Progress and select those that match the objectives of the local curriculum. Such a process can result in valid and reliable items as well as ownership at the local level.

The decision to make or buy the test can really be made only after considering how the results are to be used and how many resources — human and material — can be afforded to complete the task.

Evaluating affective and psychomotor development

As the task of the school has changed in the last decade, instruction has expanded to include goals related to self-concept, social skills, decision-making, value clarification and aesthetic appreciation. Many questions were raised regarding the compatability of such skills with minimum competency testing. Many participants question if it is possible, or even desirable, to apply minimum standards to attitudinal areas. Requiring a "proper attitude" for a high school diploma is generally agreed to be inappropriate.

Many concerns were expressed that the humanistic influence of the 60s and 70s has brought positive changes and should not be lost from the curriculum through too much emphasis on the testable skills, which are primarily cognitive and often low level thinking skills. While many are hoping that the movement will place larger emphasis on cognitive curriculum, others feel that the goals of the humanistic approaches and minimum competency testing are not incompatible.

The concern was expressed in all conferences that "if it is not tested it will not be taught." Some specialists in "not so basic" areas have as a result pushed for inclusion of their domain in testing programs hoping that the technology of testing will be developed to measure growth in such areas as ethics and citizenship more accurately. Other educators are taking the approach that education is not an assembly line and that the public will need to recognize that not everything deemed important can be included in a testing program.

When Will You Measure?

The choices of when to measure competency, posed by Brickell, included measuring at the end of school, during school and a combination of the two. Participants generally agreed that a simple test at the end of high school left no time to correct deficiencies. As one participant from Alaska stated it, "The 12th-grade competency test is but the very small tip of a large iceberg." Conferees generally agreed that minimum competency efforts need to be concentrated more to measure progress at the elementary level where the system is designed to teach the basic skills. The assumption is that diagnostic tests provide valuable input to develop the skills in students in elementary schools where the best opportunities to learn basics are available. Concern was expressed that present legislation or policy in some states places too much emphasis and concentration of resources on those ready to graduate to the neglect of the remainder of the student populace.

Finance

Minimum Competency Programs Costs

While many taxpayers may hope that minimum competency testing will result in a tax savings, it appears that effective programs will actually increase school budgets. Placing a dollar figure on the various components of minimum competency testing programs requested by policy makers is an important task to address before the mandates are handed down for implementation. The checklist of items suggested by participants to be financed at some level should include:

Test development

Evaluation specialists gave a range of figures that indicate the development and pilot testing of testing instruments will be expensive if done correctly. The reported average development cost of $100 per item startled some participants.[13] State costs will vary, depending on the method and scope of the project undertaken. Kentucky expended $6 per student for the development and piloting phase of statewide programs. California reportedly spent $2.5 million to create models for districts to use in developing their own programs. States can save money by delegating the task to districts, but the almost inevitable duplication of effort by various districts may increase the total cost. This dilemma has led many states to endorse the concept of item banking and the formation of consortiums to share the expenses for this aspect of minimum competency testing. The participants concluded that the developmental cost aspects of the program must be carefully planned or there is risk of exposure to court challenges and public outrage.

Administration and monitoring

If the program is to be useful, the data collected must be interpreted, analyzed and recycled for use in the classroom. The resulting cost of administering and monitoring testing programs will vary with the amount of scoring, reporting and record keeping demanded by specific tests. Activities associated with compliance can require more personnel or create a drain on existing services.

Inservice training

Teachers and administrators will not only need training in the specific testing programs to be implemented but also time to develop remedial programs. Many districts are reevaluating released time and inservice budgets in response to this need since comprehensive programs are difficult to develop during after-school meetings.

Remediation, alternative programs

A very real financial consideration is how many students a system can afford to remediate. Assuming that the system has not delivered the skills needed through the present program, existing programs must be supplemented or revised, but at which level? For example, how much money will be required to help a 10th grade student raise a test score from 2nd to 8th grade level? Participants offered evidence that remedia-

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[13]The costs of testing are described in Barry Anderson, *The Costs of Legislated Minimal Competency Testing*. This paper, prepared for NIE/ECS workshops is summarized in Section 4 and available upon request.

tion is more costly and less successful the longer the wait to provide the help. A Florida resident expressed concern that disproportionate amounts of resources in her state were going to help 11th grade students prepare to pass the state test at the expense of students in the lower grades who could be helped more efficiently.

Indirect costs are also a financial consideration. Under this umbrella, participants discussed the social costs related to increased number of dropouts and students choosing early exit (some of the latter perhaps falsely assuming that passing a test makes them skilled). With increasing numbers of low-skilled young people looking for work, the impact will probably be found in the unemployment and welfare figures. School districts also are considering the economic hardships caused by budgeting additional teachers and resources for students who may choose not to complete the academic year.

Some districts are anticipating a backlash by the parents of the high- and average-ability students against the reallocation of district resources to help the marginal students. Thus, some additional costs may be incurred for the development of programs to enhance the skills and abilities of the gifted.

The opportunity costs related to testing were mentioned in one group. Some felt that funds allocated for testing could be better spent on the improvement of teaching strategies, additional instruction programs and other inputs to improve learning, rather than on tests to measure the output.

Who Should Pay?

Once the price tag has been established, the next question is "Where will the money come from?" States often appropriate funds for testing but expect the local districts to provide programs for students who do not pass — which is the more costly part of the process. Many feel that if the legislators believe that minimum competency testing will improve achievement, they should also be willing to finance the entire program since their decisions will directly influence the spending patterns of local districts and possibly cause some disruption to ongoing programs.

Legislators desiring the most possible for the least amount of additional state money are hopeful that the costs can be absorbed by the local districts. Disagreements with this philosophy were expressed by small rural districts that run high per-pupil cost because they do not have the built-in expertise or tax base for specialized minimum competency testing procedures, and by urban districts burdened with large numbers of students in need of remediation. While districts are preparing to reconsider priorities, many are questioning what portion of the district resources can or should be directed toward teaching the minimum. Fiscal conservatives are suggesting that the programs be tried on a small scale to test effectiveness of minimum competency mandates before large amounts of resources are expended at either the local or state level for programs that may prove to make little or no difference in achievement of students.

Mechanisms for State Financing

Participants considered several factors which could be part of a state formula for funding minimum competency testing programs.

Tie state funding to achievement scores

The conversation at one conference suggested that there is a trend away from using test results as an indicator of where funds are needed. Some argued that if funds were provided to districts or schools with low scores,

there would be little incentive to improve student performance. However, the opposite policy of withholding funds because of low scores was criticized because the students most in need of help may be deprived.

Weighting factors

Some states, including Florida and Utah, have developed a formula for providing remedial funds based on program cost. Kentucky reportedly provides 60 percent extra funds for students who need a predetermined program. Concern was expressed that such policies might lead to an explosion of the number of students recommended for special programs once additional money is available, if no external controls guide the program.

Categorical grants

Incentives for setting up minimum competency testing programs at local levels might be provided by making grant monies available to districts for the development and implementation of testing programs. Such a plan is attractive to states who wish to avoid the pressure for ongoing support. A variation of this idea is to provide technical assistance and funds for remediation for districts that have already taken the initiative to set up testing programs.

Federal funding

While federal funding is a consideration in state formulas, the issue is also more encompassing. Districts are hoping for consistency between the federal and state requirements and flexibility in the guidelines for use of funds at local levels. Questions were raised by participants regarding state programs for students already benefiting from Title I or compensatory education funding. Presently, some Title I students are receiving two reading classes and two math classes per day. Local officials are hoping that the funding can support instructional opportunities that will not involve third sessions of reading and math for some students and ignore others with equally severe problems. Participants were looking for answers to such questions as: Can the monies be commingled at the local level? Will accounting needs demand clearly defined pullout programs? How can state funding be used to enhance and build ongoing programs without risking the loss of federal monies?

Section 3: The Next Step . . .

One Midwestern senator after complimenting Brickell on his presentation, marveled at the complexity of the issues and expressed the thought: "I'm not sure we can get there from here."

She spoke for many who came to the conference looking for answers to the "how to . . ." questions. Like many others, she found that the majority of the participants were asking similar questions rather than providing answers tested by experience. If there were any who attended the conferences to receive plans which could be quickly and cheaply duplicated, they were disappointed. None were available. Brickell's advice was to select the forks in the road carefully and to accept the consequences of the choices. Participants left with the clear impression that the development of a state plan was a difficult but most important process.

Participants differed on the position their respective states should be taking. Some participants expressed pride that their states are pioneers in the minimum competency testing movement; others were content to have their states sit back and learn from the experiences of those states that are in the more advanced stages of executing plans. Some policy makers and practitioners crystalized both policy and implementation plans at the workshops, while others decided to postpone planning based on the complexity of the issues other states are addressing in regard to setting standards. In some cases, individuals stated they will look for alternatives to minimum competency testing for improving the achievement of students and schools.

Because each state has a unique set of circumstances that influences the state policy regarding minimum competency testing, it is not unexpected that the states, sometimes through similar activities, will be moving in different directions. The intrastate planning sessions at the close of the conferences provided an opportunity for each state's "unofficial delegation" to share insights and knowledge acquired throughout the conference, and address the issues and needs that exist for their respective states. Generally, people agreed that the conference issues were worthy of attention, and the process of discussing competencies and standards was valuable.

The state reports[13] presented at the closing luncheons contained suggestions, recommendations and questions that have been classified in this report into three categories: suggestions for action and study, need for research and technical assistance and possible pitfalls.

Suggestions from State Reports for Action and Study

1. Review laws and policies relating to minimum competency testing
An analysis of laws and policies to determine the type of intended and/or

[13]Since participants did not represent states in official capacities, the names of states are not included with specific recommendations.

unintended consequences which may result from the mandates was a strong recommendation of many groups.

a. Participants mentioned that some states should review existing laws and policies that have a direct impact on minimum competency issues. Such review may reveal if any have overlapping intentions or conflicting purposes that should be modified to facilitate more effective implementation efforts. Among the laws in need of review are those which establish separate and, sometimes, disjointed guidelines and timetables for elementary and secondary schools, as well as laws regarding attendance, graduation requirements, financial equalization and desegregation. Similar review in other states would consider the consistency of laws with long range state and local district plans.

b. Some participants wanted a review of state laws to determine the degree of vulnerability of local and state officials to law suits brought by individuals who believe that the test or some other component of the program is discriminatory or otherwise illegal.

c. Policies and laws of some states need to be reviewed to provide flexibility for the adaptation of minimum competency testing program to changing needs. Concern was expressed that rigid mandates cannot anticipate the need for additions to, or modifications in, the planning and implementation processes. Comprehensive long-range planning involving practitioners and policy makers at many levels was one suggestion for providing the needed flexibility.

2. Convene state meetings

Capitalizing on the public interest in the issue of setting standards, many states identified the need for a variety of gatherings to address issues which emerged at the conferences.

a. Conferences similar in climate and format to the one described in this report will be planned at the state level. Agendas should include such items as dissemination of information, a study of the implications of past decisions and the setting of future directions.

b. Public hearings and forums are needed in some states to determine how much interest exists in the issues, to acquaint the public with state plans and to enlist the help of both noneducators and educators in setting a direction for policy development.

c. Task forces and working committees aretools suggested by participants for states seeking recommendations for legislation or program development. A committee in some states is needed to serve as a coordinating body for planning policy and procedures.

3. Review funding mechanism

Recommendations will be made in some states for more direct coordination of the financial and educational aspects of minimum competency testing programs. Funding alternatives need to be studied following the development of detailed budgets for the various components of the program. Some policy makers indicated the need to reconsider ambitious programs because of limited local and state resources for program development and remediation.

4. Suggest revisions in implementation plans

Some participants will recommend that their states move more slowly with implementation and planning. Recommendations for comprehensive planning may require reconsidering the sequence of events, adding new steps to the established process or evaluating the consequences of past decisions. The following list of program components will be recom-

mended as additions or changes to minimum competency programs by participants in one or more states:

a. Conduct assessments and/or pilot programs before developing a statewide mandatory testing program.
b. Begin testing for diagnostic purposes in the early grades.
c. Validate high school proficiency tests by administering the test to adults in the community.
d. Study the impact of testing on special populations.
e. Study the impact of proficiency testing on total curriculum.
f. Clearly define education expectations to students and parents.
g. Study the relationship between drop-out rates and proficiency testing.
h. Extend the timeline for implementation.
i. Evaluate the success of existing remediation efforts.
j. Evaluate the impact of the certificate of attendance.
k. Plan an evaluation program that is broader than minimum competency testing.
l. Find out how much student time is spent on district/state testing programs.
m. Evaluate how the test results will be publicized.

5. Promote instructional change

The most critical need to be addressed, according to some participants, is to bring change to the education system before asking changes of the student. Specific recommendations for increased attention to the teaching/learning process included the following suggestions for inservice training and the development of model projects:

a. Insure that teachers have knowledge of basic skills.
b. Provide model techniques in diagnosing and evaluating student skills.
c. Check to see that the curriculum provides instruction in the competencies selected.
d. Motivate policy makers and practitioners to initiate and support reforms in the system.
e. Facilitate skill development at the secondary level through such practices as differentiated staffing and individualized and small group instruction.
f. Design and implement broad systems of accountability.

6. Make decisions as close as possible to the local level

Participants reached consensus that the problems of low achievement cannot be solved through the establishment of national standards. Because states have differing education philosophies and problems, the feeling was that the issues must be approached from the particular state perspective.

In support of local ownership, several participants recommended the development of policy to encourage school and community decisions in the selection of competencies and the development of a testing program. The individual school was suggested as the optimum unit for many of the necessary decisions.

7. Use of multiple criteria

Many participants will recommend that decisions about student competency should be based on multiple evaluation procedures (i.e., teacher recommendation, student interviews, daily observation, minimum com-

petency test). Strong sentiment was expressed that 12 years of schooling cannot be adequately measured through a single test of minimum competency.

8. Emphasize competency testing for diagnostic purposes

Some participants will suggest that the emphasis of minimum competency testing programs be placed on continuous and sequential competency development starting in elementary grades and continuing through high school. Waiting until 12th grade to test was not a popular idea. While few reports indicated support for testing as a prerequisite for high school graduation, more returned home to suggest that minimum competency testing not be tied to graduation requirements.

The consequences of retentions and social promotion upon the academic achievement and social growth of children was identified as an area needing more study. At present, many feel that the available research does not support retention as a beneficial alternative.

9. Improve Communications

a. Communication of the type experienced at the conferences was recommended. Opening channels of communication at and between all levels, and among the various decision makers, influencers and implementers, with a common focus on improving American education, was seen as a valuable goal.

b. Some participants found it would be necessary to reach agreement within the state on some basic philosophical questions before a testing program could be designed. To avoid frustrations and misinterpretations, some participants will work toward the goal of improved communication regarding common definitions, types of competencies, statements of purpose, etc.

c. Organizing a campaign to improve public relations is another goal. Practitioners plan to publicize the types of knowledge and skills that students are acquiring at earlier ages than ever before, as well as apprise noneducators of specific efforts to improve basic skill development. Many feel that the public needs to hear about both the benefits and limitations of minimum competency testing from the educators.

d. Many practitioners want to build stronger working relationships with policy makers interested in education and with legislators in their local community. Some plan to become advocates for laws designed to improve schools and help children and, accordingly, speak in opposition to those components of existing laws which are proving unmanageable.

Need for Research and Technical Assistance

The list of needs for technical assistance and information suggested in the state reports included some modest requests, but also some that will materialize only through comprehensive planning. The list of requests gleaned from state reports includes:

1. Clearinghouse for Interstate Sharing & Technical Assistance

Participants who hope to build plans based on the experience of other states, recommend the creation of a clearinghouse to disseminate information. Roles suggested for the clearinghouse include:

a. Study of the impact of specific legislation
b. Compilation of lists of contact people and consultants
c. Identification of sources of technical assistance

d. Dissemination of research and model projects
e. Monitoring the progress of implementation efforts throughout the states
f. Planning of conferences on specific issues and problems
g. Creation and coordination of networks for sharing expertise among states moving in similar directions
h. Facilitation of the exchange of information about successful features of legislation and policies
i. Collection of longitudinal data of various programs.

2. Item Banking

Among participants responsible for building tests, great interest was expressed in forming a consortium to coordinate the development and sharing of objectives and related test items. Some state reports suggested that the NAEP item pool could furnish a good beginning for the creation of an item bank.

Interest was also expressed in follow-up studies to determine how test results are used. In particular, people need help in the use of assessment data as a tool for instruction planning and a set of suggested guidelines to prevent the misuse of test data.

One state representative mentioned the need for a nationwide validation of test items.

3. Additional Research and Information

A broader base of knowledge and information is needed to facilitate decisions at the state and local levels. Some of the following areas of need were identified by participants:

a. Develop strategies for enhancing diagnostic/prescriptive learning and remedial help.
b. Study the impact of minimum competency testing on the drop-out rates.
c. Identify the advantages and disadvantages of various legislation as illustrated through case studies of implementation in local districts.
d. Identify the types of incentives that can be used to improve school systems.
e. Develop programs to help trainers of teachers become role models in competency based education processes.
f. Develop model projects to reform the secondary schools.
g. Determine whether some tests are better than others.

Checklist of Possible Pitfalls

Participants generated the following list of problems that may limit the effectiveness of minimum competency testing programs. Avoiding the pitfalls listed below should lead to stronger planning and implementation efforts.

1. Losing sight of the students' needs.
2. Allowing the test to determine the curriculum and instruction.
3. Assuming that a state's legislation or testing program will transfer appropriately to a new situation.
4. Tying an untested program of minimum competency testing to high school graduation or teacher evaluation.
5. Implementing a program without a broad base of support at the grass roots level.

6. Not allowing enough time for selecting competencies, determining standards, piloting tests or planning curriculum revisions.
7. Asking for a "Cadillac Model", but allowing only a "Model T" budget.
8. Ignoring the special subpopulation needs (bilingual, handicapped, learning disabled).

Many participants felt that the suggestions that emerged from the state planning sessions are indicative of a growing realism on the part of both the political and educational leaders about minimum competency testing. The conference, it appears, helped both practitioners and policy makers recognize some of the implications of the changes they are seeking. In the process, issues have been identified for further study, problems have been shared and several policy issues have been addressed. It appears that minimum competency tests and standards are not being viewed as a panacea to cure all the ills of the education system, but as one tool that — with wise use — has potential to help educators and policy makers make decisions, which will result in better education for students.

Section 4: Background Papers

Each of the five background papers prepared by scholars and practitioners for the conferences raises some significant questions, issues and possible implications of minimum competency testing for state and local leaders to address as part of the planning process. Highlights of the papers are presented in this report but, for specific interpretations, it will be necessary to read the original works in their entirety. A careful reading of these papers could provide valuable assistance to leaders undertaking a systematic approach to minimum competency testing. Other articles that were discussed at one or more of the conferences have also been included in this section.

The Politics of Proficiency

E. W. Kelley
Cornell University

Through a discussion of the political "actors" of the proficiency testing movement, Kelley provides an analysis suggesting which groups and individuals will potentially gain and which will lose.

Students:
Some will be helped, others will not. Those who work hard but do not pass this test will be harmed the most.

Test Developers, Researchers and Educational Administrators:
New business, financed with public money, will justify and serve their positions and prerogatives.

Teachers:
The teaching profession will be enhanced by the need for specialization. The evaluation of individual teachers will not be affected by low achievement of students.

Special-Interest Groups:
Those groups which are well organized will get their way but individuals without power will not. Minorities who have benefited from equality of opportunity as judged by number of completed years of schooling will lose some opportunities.

Politicians:
Those who pick up the banner for setting standards will get votes.

Kelley states that he does not advocate minimum competency testing because a large subset of students, largely poor and minority, will drop out of school as a result. Other potential reasons for not supporting testing also emerge from his political analysis:

1. The interest in declining scores is more directly related to high taxes than concern that students cannot read.
2. Remediation will be aimed at the marginal, but not the helpless.
3. The curriculum opportunities for students at the low end will be reduced because departments will design programs for the students who pass rather than those who fail.

The Costs of Legislated Minimal Competency Requirements

Barry D. Anderson
Washington University

Anderson provides an economic analysis from two perspectives: 1) minimal competency as a form of government regulation and 2) a cost-benefit approach. Some quotes from the article:

> "Economic theory, and common sense, suggest that one should not attempt to enforce a regulation unless the gain from doing so is greater than the cost of enforcement.
>
> "If one believes that everyone can master most things given enough time (and time is money), then it follows that the more people who must master a skill, the more it will cost society.
>
> "Little attention has been paid to the possibility that this sort of legislation will increase the cost of public education."

Where might the dollars go? The article suggests the following potential costs for testing programs:

- Set-up costs of legislation — hearings, data collections, studies
- Implementation costs — piloting, modeling of proposed legislation
- Information costs — preparing and revising "plans" to meet legislative plans
- Administrative — record keeping and reporting expenses
- Enforcement costs — staff to monitor, evaluate and police
- Costs in lost support to programs previously receiving funding
- Test development costs
- Test administration
- Remedial work — the great hidden cost

Minimum Educational Standards: A Systemic Approach

Thomas Green
Syracuse University

Green suggests, through a historical examination, that problems related to setting standards have emerged, in part, because such large numbers of students are graduating from high school. For example, the emphasis on retaining students in the system has come into conflict with the desire for uniform meaning in diplomas and, as a result, a single certificate of attainment has become increasingly unclear. The attainment of a diploma is becoming an inadequate societal tool for the distribution of social and economic benefits since so many have reached the given level; but for the decreasing minority of students who drop out of high school, the problems are more severe.

The two following propositions are also explored and clarified as part of Green's social and philosophical analysis of the education system.

1. "The goals that we express in policy for the system are always minimal standards because in the social practice of the system — as opposed to its management — they operate always as measures of failure rather than as standards of success.
2. "Minimum standards are unlikely to succeed unless they are underwritten by appropriate and successful political arguments."

Legal Implications of Statewide Pupil Performance Standards

Professor Paul L. Tractenberg
Rutgers University Law School

For states which presently have or are considering statewide minimum performance standards, Tractenberg explores a variety of legal theories that might be used for challenging standards. Those challenges might include standards which are absent, unduly low, inappropriately fixed or cause undue stigmatization to students. Possible defensive arguments, which might be invoked by local and state arguments, are also presented.

While the courts have historically chosen not to challenge the exercise of discretion among school authorities, Tractenberg suggests two areas of vulnerability:

1. Programs designed to fit an invidious purpose and
2. Agencies which withhold diplomas or identify low achievers without providing remedial or diagnostic help.

The article suggests that arguments for requiring a state standard would be based on the need for tests as a basis for remediation or in those states with strong language about uniformity so that the state cannot allow districts to set standards that are widely different.

A Critique of "Minimal Competency Testing"

Arthur E. Wise
Education Policy Consultant

In his critique of minimum competency testing, Wise suggests that high-level policy interventions will not solve the problems of low achievement. He feels that too many advocates of testing believe that the existence of a test will cause the schools to reorient themselves so objectives will be attained. Such a philosophy is based on the assumption that the child is pliable and will learn as he has been legislated; that the teacher is pliable and will change behavior in the face of legislation; and that a science of education exists which can be applied to yield appropriate treatments and solve learning problems.

Wise feels that the solutions to the problem are more *technical* than *political*. In that context, he offers three recommendations to improve achievement:

1. Higher levels of government should be concerned with promoting equality of educational opportunity.
2. The establishment of standards and the operation of schools should be the responsibility of the local boards of education and its staff.
3. Minimum competency testing will not solve the problems of poor learning and poor teaching; serious research is required.

The following papers were shared informally at one or more of the conferences:

"Standards and Criteria"
An Occasional Paper, Center for Evaluation,
Western Michigan University, Kalamazoo, Mich.

Gene V. Glass
University of Colorado

The author analyzes and critiques six methods of setting standards (including the use of experts to judge a test) as a basis for his conclusions that any effort to determine competency in relationship to an absolute standard will be capricious and authoritarian. The only safe criterion, according to Glass, for determining competency is through judgments based on comparative evidence, i.e., measuring increases and decreases in cognitive performance.

"Competency Based Evaluation: A Bandwagon in Search of a Definition"
Educational Researcher, Vol. 6, No. 1 (January, 1977), pp. 9-14.

William G. Spady
National Institute of Education

A more comprehensive definition of "Competency Based Education" that extends beyond the discussion of minimum competency in basic skills is set forth. The concept of "Competency Based Education" provided by Spady would demand reorganization of the school activities to provide the following six elements:

1. *Outcomes* linked to demonstrated life role success and used as the basis of instruction activity.
2. *Time* used flexibly in conjunction with multiple opportunities for instruction and evaluation.
3. *Instruction activities* expanded within and outside the school in variety sufficient for student selection in pursuing a given objective.

4. *Measurement* criterion referenced, where the criteria are clear and known by students as well as staff.
5. *Certification* determined solely by competency attainment rather than at fixed points in time.
6. *Program adaptability* considered in terms of constantly changing needs and based on continual assessment of student performance.

"Competency Testing: Potential for Discrimination"
Clearinghouse Review, Vol. II (Sept., 1977), pp. 439-448.[14]

Merle Steven McClung
Center for Law and Education

Suggestions for the design and administration of a fair minimum competency program are presented with specific references to problems that may arise in six areas:
1. Racial discrimination.
2. Inadequate phase-in periods.
3. Tests that are not reliable or have not been validated.
4. Inadequate matching of the instruction program to the test.
5. Inadequate remedial instruction which creates or reinforces tracking.
6. Unfair apportionment of responsibility between students and educators.

The APL test and the Palm Beach County, Fla. schools are used to illustrate legal theories.

"Competency Based Education: Organizational Issues and Implications"
Educational Researcher, Vol. 6, No. 2 (Feb., 1977), pp. 9-15.

William G. Spady
National Institute of Education

Douglas E. Mitchell
University of California, Riverside

The article provides a clarification of some of the organization issues that distinguish the comprehensive theoretical definition of "Competency Based Education" (CBE) provided by Spady (1977). A matrix is used to organize the commonalities and differences of various CBE approaches. The authors show that diverse major views of education representing groups they call "Modern Traditionalists," "Accountability Advocates," "Humanistic Critics" and "Reform Advocates" can be explained as divergent perspectives regarding appropriate goals and rules in schooling. The authors also address the implications of the theoretical approach to the organizational operation of schools.

An Address Before the College Entrance Examination Board
Annual Meeting Oct. 24, 1977

Joseph A. Califano Jr., Secretary
Department of Health, Education and Welfare

(Copies may be obtained from HEW)

In his address, Califano described some uses for tests (diagnosing individual learning problems, certifying that students possess basic skills, making the schools more responsive to taxpayers and parents), discussed the limitations of tests, and provided reasons why national tests and standards are inappropriate. In stating a preference for programs at the state and local levels, he said: "Federal testing programs, however well intended, are misguided; even a wholly voluntary national test or set of standards would be a step in precisely the wrong direction."

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[14]A summary of this article will appear in *Phi Delta Kappan*, February 1978.

Discussion Guide for Minimum Competency Testing Available Through ECS

Henry Brickell
Policy Studies in Education

Brickell has prepared a set of discussion guides, written in plain English for use by groups making decisions related to minimum competency testing. Legislative committees, state boards of education, state departments of education, state professional associations, local boards of education, faculty groups and citizen/parent groups will find the set of guides useful for focusing systematically on issues to be addressed.

Each discussion guide deals with alternative solutions and the pros and cons of the various alternatives through a checklist form. Every aspect of the movement is covered under such headings as What Competencies, How to Measure, When to Measure, Setting Minimums, and Helping the Incompetent. Possible uses for the guide include dissemination in advance of meetings to provide background information related to discussions, use at conferences to guide discussion as it occurs and use as a tool for surveying opinion separate from conferences or meetings.

Appendix A

SEVEN KEY NOTES

on

MINIMAL COMPETENCY TESTING

by

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New York, New York
A Division of the Academy for Educational Development

for
THE EDUCATION COMMISSION OF THE STATES
and the
NATIONAL INSTITUTE OF EDUCATION
in cooperation with the
CARNEGIE CORPORATION

at
Four Regional Workshops
in

Atlanta
Boston
Denver
San Francisco

October, 1977

I want to strike not one but seven key notes since the policy you compose for minimum competency testing must have seven themes or it will be an unfinished symphony. That is, there are seven things to think about, seven elements in your competency policy:

1. What competencies will you require?
2. How will you measure them?
3. When will you measure them?
4. How many minimums will you set?
5. How high will you set the minimums?
6. Will they be for schools or for students?
7. What will you do about the incompetent?

1. WHAT COMPETENCIES?

That is the first question.

Begin by distinguishing between school skills and life skills, between the skills it takes to get by in school and the skills it takes to get by in life, between those needed to succeed later in school and those needed to succeed later in life.

There is a difference. And there are different tests for them. Here is a question from a *school skills* test:

- If John has 70 marbles and gives José 13 marbles and gets 26 marbles from Slim and gives 38 marbles to Alice, how many marbles does John have left?

And here is an item from a *life skills* test:

- Balance this checkbook by adding these deposit slips and subtracting those cancelled checks.

Both require arithmetic but the first one—although it sounds easier—requires the student to abstract the ideas, decide to add and subtract, and arrange the numbers before making the computation while the second one does not. The first are classic skills of the school room, excellent predictors of success in higher levels of mathematics. In fact, it is more important to set the problem up correctly than to get the right number of marbles—if we are talking about *school skills*.

But if we are talking about *life skills*, getting the bank balance right is everything.

Here is another *school skills* question:

- If there are 77 teeth in $2\frac{3}{4}$ inches of hacksaw blade, how many teeth are there in $3\frac{}{3}$ inches?

Here is another *life skills* question:

- To saw very hard metal, should you buy a hacksaw blade with few teeth or many teeth?

The first will indicate whether the student is ready for the next course in school; the second will indicate whether the student is ready for the shopping center. Both are important. Which competencies should you require?

How about school skills for the college bound and life skills for the job bound? Or maybe both for everybody? How about school skills for promotion to the next grade and life skills for graduation from school. Or maybe both at every point in school so that every student must climb a stepladder of learning with its rungs held up on two sides: school skills on one side, life skills on the other side?

Of course, there are basic skills—such as reading, writing, and arithmetic—used in both school and life, which is why we call them "basic."

	SCHOOL SUBJECTS				LIFE AREAS				
BASIC SKILLS	Art	Business	English	Etc.	Citizenship	Work	Family	Etc.	Total
READING									
WRITING									
ARITHMETIC									
ETC.									
TOTAL									

Thus you have five choices. You could test competency in each:

1. Basic skill.
2. School subject.
3. Life area.
4. Basic skill *applied* in each school subject.
5. Basic skill *applied* in each life area.

The obvious choice is #1: Basic skills. But wait a minute. Look at the others.

- Unless you choose #2, teachers of art and music and science and social studies and foreign languages and driver education and vocational subjects will have no minimum standards.
- Unless you choose #3, teachers can teach about school and not about life.
- Unless you choose #4, students may spell a list of words correctly in English class but misspell them in their science laboratory notebooks.
- Unless you choose #5, students may learn to add and subtract but be unable to balance their checkbooks.

But you can't select them all because schools do not have time and money for that much testing. So choose very thoughtfully. You will have to live with the consequences.

2. HOW MEASURED?

How will you measure the competencies:

The possibilities range from testing through actual experience to testing with paper and pencil. There are some points in between:

1	2	3	4
Actual Performance Situations	Simulated Performance Situations	School Products and Performances	Paper And Pencil

So you have four choices. You could test through:

1. *Actual performance* situations in later school or on the job. This is the ideal "testing." The student demonstrates minimum competency by entering and graduating from the next level of

schooling or getting a job and keeping it. The trouble is that such "testing" is expensive; it takes years; and the results come back too late to help either the school or the student.

2. *Simulated performance* situations set up in the schoolhouse to resemble those in later school or on the job. This is good testing. The student demonstrates minimum competency in artificial situations like the real ones to come. This is cheaper, takes less time, and gives quicker results to help school and student correct failures. But it isn't perfect: 1) the situations are not real and the results may not match actual performance later, 2) there are few good tests available, and 3) it takes more time and money than using paper and pencil.

3. *School products and performances*. These are essays, paintings, experiments, clarinet solos, brake jobs, speeches, touchdowns—things students make or do while studying in school. This is not as good as simulated performance testing because the student usually has had help, the test pressures are missing, and it is hard to score the results. But it takes less time and money than arranging special simulations.

4. *Paper and pencil tests* in the classroom—what we usually think of as "tests." Most of these measure a narrow band of knowledge or skill and are far removed from actual performance situations. Thus the results may not foreshadow later success in school and life, where success depends on attitudes, values, personal warmth, leadership, creativity, physical strength and other things a person cannot show with a piece of paper and a pencil. But those tests are quick and easy and cheap and available.

To summarize, as you move away from actual performance situations in life and move toward paper and pencil, testing becomes easier and cheaper but the test results become less likely to predict later success. Thus a student can fail on a minimum competency paper and pencil test but pass in the actual performance situations of real life. Remember this later when we talk about using test results to withhold diplomas.

Now you might want to do this: use simulated performance situations to test *life skills* and use paper and pencil to test *school skills*.

Here's why: taking a paper and pencil test is, in fact, an actual performance situation in school. Indeed, you could call it the most important school skill of all. In that sense, paper and pencil tests are not artificially removed from school, but only from life. Since a student who does well on a paper and pencil test today should also do well in school tomorrow, you may choose to test school skills accordingly.

Remember: different kinds of tests may give you quite different results. So decide carefully.

There is another decision you have to make; will you develop your own tests or use what is available: as you move toward paper and pencil and as you decide to test school skills, you will find more and more tests to choose from. And vice versa. For instance, you will find many paper and pencil tests of solving science problems, an important school skill, but you will find few simulated performance tests of ethical behavior, an important life skill.

3. WHEN MEASURED?

Will you measure competencies during school or at the end of school?

Do it during school if you believe:

- You want to measure competency to move up from grade to grade in school.
- Students and their parents deserve a distant early warning if there is trouble ahead.
- Administrators need to make changes any time students do not progress: changes in curriculum, course selection, faculty in-service training. Only formal competency tests will alert administrators to unsatisfactory learning early enough to do something about it.

Do it at the end of school if you believe:

- You want to measure competency to move out of school and into the next school or into life.
- Students learn at different rates. All students deserve enough time to reach the minimum.
- Teacher-made tests and daily classroom contact will identify students who are not making progress during school. Formal competency testing is not needed.

Now, you could measure:

- *School skills during school* to decide promotion from grade to grade.
- *Life skills at the end of school* to determine graduation.

Or you could measure *both at the end* if you feel that:

- Even the college-bound should be competent for life (many college students have already started working).
- Even the job-bound should be competent for further school

(adults returning to school fill half the college classrooms today).

4. ONE MINIMUM OR MANY?

Will you set one minimum for all students or will you consider ability, special talents, family background, or other factors we know affect the *learning of students*? Will you set one minimum for all schools or will you consider community characteristics, faculty composition, school spending, or other factors we know affect the *quality of schools*?

Think about student ability as one example. A single standard can be too hard for a dull student yet be too easy for a bright student: impossible for the dull and thus not motivating, trivial for the bright and thus not motivating, objectionable to parents and teachers of the dull, laughable to parents and teachers of the bright and thus acceptable to none of them.

Using a graduated standard on a sliding scale according to ability will solve all those problems. And it will instantly create others. A graduated standard expects less of some students. "Expect less, get less" is a formula most parents and teachers don't like. A graduated standard will grant a diploma to a dull but energetic student who gets 40 points on the exam and refuse a diploma to a bright but lazy student who gets 60 points on the exam. Moreover, current ability tests may not give fair and accurate measures and thus cannot guide expected achievement.

Is there a compromise with the best of both worlds? Yes, but it also has the worst of both worlds. You can use a low minimum for every student regardless of ability and a graduated minimum for students of, say, above-average ability. This does not expect the impossible from anyone but it does expect more from students who clearly can do more. The old problems—such as how to measure ability—are still there, of course.

The identical principles apply to setting single standards vs. graduated standards for schools as for students. A single standard may demand nothing of a wealthy suburban school and the impossible of a poor ghetto school. A graduated standard may label poor schools as places without hope or give them an excuse for not improving, neither of which is good for students, teachers, administrators or students.

Perhaps you should set a separate standard for each student, considering his/her ability, special talents, and background—a standard negotiated among student, teacher, and parent. And perhaps the same for each school—a separate standard negotiated among board, administration, and faculty. Admittedly, the logistics would be formidable.

You may want to arrange several minimums into a graduated sequence to check student progress from grade to grade. Again, you may want to set a rough, general minimum immediately and refine it into specifics over the years ahead.

5. HOW HIGH THE MIMIMUM?

If you take a cross-section of a school at any grade, you will find that some students are actually performing far above that grade and others far below. Some fifth graders do eighth grade work while others do second grade work. Some twelfth graders do college work while others do sixth grade work. The school is a staircase with one step labelled "seventh" but only half the 12-year-olds are standing on it.

Recently, a group of high school teachers made two minimum competency tests for the end of tenth grade: one in English, the other in mathematics. Any student who failed would get remediation, possibly two years of it, and possibly no diploma--good reason for the teachers to make the tests fairly easy and good reason for the students to try fairly hard.

I saw the tests and would say they were about fifth grade--long division, spell "separate", things like that--with a passing score of 60%. Not very hard. About 25% of the tenth graders flunked the English; about 50% flunked the math.

I talked with the teachers and principals afterward:

> "Suppose remediation doesn't work," I said. "Students haven't learned it in five years and may not in two more. Then what? How many diplomas can you withhold at commencement--as many as 20%?"
>
> "Of course not! Parents wouldn't stand for it. The Board, the administration, and the faculty would cave in under the pressure," they said.
>
> "Then how many diplomas can you refuse? How about 5%," I said.
>
> "Make that 3%," they said.
>
> "All right, 3%. Then 97% *have* to pass the minimum competency tests. What can you teachers and principals *guarantee*--not wish--that 97% of all graduates can do?" I said.
>
> "Guarantee? Really *guarantee* for 97%? Well, first grade work; maybe second grade--if you mean a guaranteed minimum," they said.
>
> "Won't that be embarrassing to the school?" I said. "Second grade work?"
>
> "Not as embarrassing as withholding 20% of the diplomas," they said.

You need to understand that, traditionally, minimums are something schools try for, not guarantee. They are goals, not standards. "Zero defects" is not a schoolhouse expression; "each student to his/her own potential" is. And just as that potential has no upper limit, it has no lower limit.

How many students can your school or state afford to remediate--or not

promote or not graduate if remediation fails--afford both economically and politically? About 10%, more or less? Certainly it isn't 20%, the percent failing competency tests in many places today. Say it is 5%. Whatever it is, the percent failing the test will probably be higher. If you can't raise students to meet the minimum, will you lower the minimum to meet the students? Those are the only two ways to guarantee that 95% will succeed.

You need to think ahead about that. Better choose a passing score, make a pilot run with your tests, see how many students fail, and decide whether to raise the students or lower the tests. A too-difficult test will embarrass you with too many failures and you will have to cut loopholes in it to let students escape--grandfather clauses, setting very low passing scores to start with and raising them year by year, and other loopholes. A too-easy test will embarrass you by being a joke to above-average students, their parents, and the taxpayers.

Don't forget the twelve-year range in the achievement of "twelfth-graders." No public school in America has been able to eliminate it.

Oh, yes. There is something else about the minimum. How can you call it a "minimum" if the successful adults in town--butcher, baker, candlestick maker, doctor, lawyer, bureaucrat--cannot pass it? Should you define "successful" adulthood as being off welfare and out of prison, give the test to a cross-section of adults, and then make the passing score equal the lowest score made by any successful adult in town? In short, what do you mean by "minimally competent"? Can you find an adult example of it walking the streets and pick his/her test score as your standard? How could you justify making it any higher?

6. FOR SCHOOLS OR STUDENTS?

One state has a new set of reading tests for grades 4, 8, and 12. What should it set as the minimum score on each test? To get the answer, that state set up an independent panel of teachers, administrators, and citizens. Then it told the panel what it meant by "minimum":

> The minimal acceptable outcome is defined as the percentage of fourth graders you believe *must* be able to correctly respond to the item for you to consider reading instruction to be meeting the *minimal* needs of our students.
>
> In making your decision on minimal acceptable performance, you will want to consider: 1) the importance of the skill being measured by the item; and 2) the intrinsic difficulty of the item itself. If the actual student performance on the item falls below the percentage figure you select, then you would consider present instruction in that skill area to be unacceptable.

And it gave the panel an example:

> In this example, the estimate for the minimal acceptable outcome is 40%. If the actual outcome were below 40%, you would feel very

concerned about instruction of the reading skill measured by the particular item.

And if more than, for example, 70% got the answer right, you would feel rather satisfied, the state went on to explain to the panel.

But what about the other 30% who got it wrong? How could the panel possibly be satisfied with the performance of that 30%? The answer is that the panel was not looking at that 30% as individual students. It was only looking at overall school performance. And if 70% of the students got the right answer, that was good enough. In short, that state wanted a minimum for the school, not for each individual student.

But what will you do: will you judge students or will you judge schools? Must each person measure up or must each program measure up? Can the school program succeed even though some students fail?

Can you see how important the difference is? It determines whether you will write test items all students can pass or only most students can pass; whether you will test everybody or only a sample; whether you will report results to each individual parent or only to the general public; whether you will settle for a school program that reaches, say, 70% of the students even if that 70% misses, for example, every single disadvantaged child; and whether you will modify every unsatisfactory program or fail and recycle every unsatisfactory graduate?

You can see the difference in costs, types of tests, demands on the professional staff to teach every student, pressures on each student to succeed, and political action by parents of each student who fails.

7. WHAT ABOUT INCOMPETENTS?

What will you do about incompetent *students*?

1. Verify the findings independently before acting?
2. Give them several more chances?
3. Lower the standard so they can pass?
4. Remediate so they can pass?
5. Refuse to promote or graduate them until they can pass?
6. Promote or graduate them with a restricted diploma or certificate of attendance?

What will you do about incompetent *schools*?

1. Verify the findings independently?
2. Give them several more chances?
3. Lower the standard so they can operate?
4. Redesign their programs to match successful programs?
5. Refuse to let them operate unless they meet the standard?
6. Let them operate but refuse to accredit them?

You notice the parallels, of course. Whether you are requiring each

student to be competent or each school to make a majority of its students competent, you can check the findings, give another chance to succeed, lower standards, modify the program, insist they meet standards before continuing, or let them go on but advertise their shortcomings to outsiders.

If *students*, each incompetent one must be held back, or remediated, or labelled and sent on. If *schools*, current students can be moved on through uninterrupted but, to help future students, the school must be closed, or improved, or left open but have a skull and crossbones painted on the door.

SUMMARY

There is a lot to think about in a minimum competency program: what competencies, how to measure, when to measure, one minimum or many, how high the minimum, for students or for schools, and what to do with the incompetent. Using the accompanying checklist will help you think carefully.

POLICY ALTERNATIVES CHECKLIST FOR MINIMUM COMPETENCY TESTING

1. WHAT COMPETENCIES?
   - ☐ Basic skills
   - ☐ School subjects
   - ☐ Life areas
   - ☐ Basic skills *applied* in school subjects
   - ☐ Basic skills *applied* in life areas

2. HOW MEASURED?
   - ☐ Actual performance situations
   - ☐ Simulated performance situations
   - ☐ School products and performances
   - ☐ Paper and pencil tests

3. WHEN MEASURED?
   - ☐ During school
   - ☐ At the end of school

4. ONE MINIMUM OR MANY?
   - ☐ Single standard for all
   - ☐ Graduated standards according to:
     - ☐ Ability
     - ☐ Family background
   - ☐ Differentiated standards according to:
     - ☐ Special talents
     - ☐ Special interests

5. HOW HIGH THE MINIMUM?

- ☐ Based on actual test performance of successful adults
- ☐ Based on judgments by informed adults
- ☐ Accepted failure rate on first testing:
  - ☐ 1%
  - ☐ 3%
  - ☐ 5%
  - ☐ 10%
  - ☐ 15%
  - ☐ 20%

6. FOR SCHOOLS OR STUDENTS?

- ☐ Schools
- ☐ Students

7. WHAT ABOUT INCOMPETENTS?

SCHOOLS	STUDENTS	TREATMENT
☐	☐	Verify Findings
☐	☐	Give More Chances to Pass
☐	☐	Lower Standard
☐	☐	Redesign Programs/ Remediate Students
☐	☐	Stop Operations/ Stop Advancement
☐	☐	Refuse Accreditation/ Refuse Diploma

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Appendix B
Four State Approaches to Minimum Competency Testing

Since the legislation and policy that various states have selected may vary greatly in both purpose and design, the following examples are presented to illustrate a range of alternatives. In no way can any four states be considered representative. A fifth option, not described, is to do nothing at all. Oregon, for example, has a statewide mandate that requires the local districts to set standards and develop tests for high school graduation, while Florida schools operate under a state mandate that is highly centralized in both the design of tests and interpretation of results. Colorado's legislation provides for proficiency testing as a local option. Pennsylvania's Project 81, operating under a state board ruling, does not mention the word minimum as part of its plan for competency development and systemic change.

The chart in Appendix C summarizes the state activity in the area of minimum competency testing as of Nov. 15, 1977. Because of the nature of the issues, changes can be anticipated on a continuing basis.

Oregon

Oregon, the first state to mandate proficiency testing (1972), changed the requirements for high school graduation for the class of 1978. The new requirements of competency in personal, social and career areas were added to the traditional courses, credits and attendance. Public hearings preceded legislation showing that the citizens recognize the need to provide students with the skills to survive economically and socially in the adult world. The state board of education (1976) modified the original legislation by extending the implementation time line. While each district must adopt competency statements and performance indicators in all areas by 1978, the class of 1978 will be tested in only the basic skills: "reading, listening, analyzing, speaking, writing and computing using the basic process." Certification in the life role areas (application of skill or knowledge to life role functions) has been postponed as a requirement until 1981.

Elementary schools are also required to establish programs for students to promote acquisition of skills and knowledge required for high school graduation.

Pennsylvania

The state board of education (1976) began working with 12 model districts through a five-year comprehensive plan toward development of curriculum, defined in terms of competencies to be developed rather than courses and credits. Entitled Project 81, the effort is a process for altering the education system to "guarantee a high school graduate the ability to be competent in the responsibilities of adult life." The steps include "identifying resources within the community to assist in

the teaching of those competencies and developing a system whereby those competencies are used as part of the graduation requirements."

Presently, the 12 districts are working with the community to select the competencies. A base-line testing program is being administered to aid in the decision making, but other forms of evaluation will be included. By 1981 the results of Project 81 will be analyzed for translation into a state program.

Florida

During the mid-sixties, school districts in Florida moved toward the development of behavioral objectives and, during 1967, submitted Pupil Progression Plans defining local programs to the department of education. The Educational Accountability Act (1976) provided the focus for accountability, comprehensive planning equivalency examinations, subject examinations and grade-to-grade promotion within the state.

The following list of items have been abstracted from the legislation designed to provide the minimum skills to function in today's society. The law has been labeled the *anti-social promotion bill:*

- A test of basic skills will be administered in grades 3, 5, 8 and 11 to identify student needs and find out how districts are doing at meeting standards. Students must master objectives to pass to the next level.
- The Functional Literacy Test, which includes the areas of reading, writing and arithmetic, must be passed for high school graduation. Three opportunities for passing the test are provided.
- A Certificate of Attendance will be awarded to students who do not pass the Functional Literacy Test.
- Students must meet the local district requirements regarding courses and credits in addition to passing the test.
- Provisions for an early exit exam are included. Students chosing to take the exam must leave school if they pass the test.

Testing takes place in October to give teachers a base for providing remedial help and to remove the possibility of blame on individual teachers for student learning problems. The state is developing forms of the test for some handicaps (large print, braille) and bilingual students will be required to pass the test in English.

Colorado

Colorado legislation (1975) provides that local boards of education may require proficiency testing for high school graduation. If standards are to be established by local boards, they must conform to the following state guidelines:

1. Instruction must be provided based on test results.
2. Tests shall be given twice a year with initial testing in 9th grade.
3. Remedial and tutorial services shall be provided within the school day until the students pass the exam.

Such a law allows districts to take many different approaches. The Denver schools have the longest history of minimum competency testing within the state. Since 1962 more than 10,000 students have taken the exam necessary for high school graduation, which includes measures in mathematics, spelling, language and reading. Presently the district is revising the testing program to include checkpoints to determine remedial needs at the primary and intermediate levels Some other districts either have tests or are considering development based on the local program.

Appendix C

STATE ACTIVITY

MINIMAL COMPETENCY TESTING

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Education Commission of the States
Denver, Colorado

November 15, 1977

STATE	ACTION TAKEN	SETTING OF STANDARDS	GRADE LEVELS ASSESSED	SKILL AREAS ASSESSED	USE OF STANDARDS AND TEST	COMMENTS
Alabama	State Board Resolution 1977	*State Department of Education	9th - 12th	*Basic skills state test	For high school graduation	*The State Superintendent of Education has appointed a committee of 100 to study and make recommendations on standards, the test and high school diploma issue. These recommendations are due 7-1-78.
Arizona	State Dept. of Education Ruling	Set by the State Dept. of Educ. Assessment by Local District No statewide test prescribed	8th Grade 12th Grade	Reading, Writing, Computation	For Graduation from 8th and 12th grades	Effective January 1, 1976, students must be able to read, write and compute at the 6th grade level to receive the standard 8th grade certificate and at the 9th grade level for high school graduation.
California	(early exit test) SB 1112-1972 SB 1243-1975 SB 1502-1976	Test and cut-off standards set by the California Department of Education.	Age 16 to adult	Process areas of reading and computation content areas: consumer economics and mathematics	Award high school diploma and leave school with parent permission	Title of program: California High School Proficiency Test Test administration and security handled under contract with private testing corporation.
	AB 3408-Ch. 856 1976	State Board to supply performance indicators and examples of minimum standards. Local districts set graduation standards.	Test once between 7-9 and twice between grades 10-11.	Reading, Writing, Computation	For high school graduation	The act also prescribes course of study requirements. In effect for the graduation class of 1980.

(California continued next page.)

STATE ACTIVITY

MINIMAL COMPETENCY TESTING

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November 15, 1977

STATE	ACTION TAKEN	SETTING OF STANDARDS	GRADE LEVELS ASSESSED	SKILL AREAS ASSESSED	USE OF STANDARDS AND TEST	COMMENTS
California (Continued from page one.)	AB 65, Ch. 894	Local districts	Once between grades 4-6; once between grades 7-9; twice between grades 10 & 11.	Reading comprehension, writing, computation skills	For remediation and grade promotion decisions	This law is to move California into elementary grade testing.
Colorado	SB 180-1975 C.R.S. 22-32-109.5	Local Boards	9 - 12 - test twice a year	Local District Option	Local District Option for high school graduation	If a local board of education imposes a proficiency test for high school graduation, it must follow the stipulations of this act.
Delaware	State Board of Education Resolution 1976	State Department of Education, after baseline test is given	Baseline instrument grade 11 1978	Level II Competencies, i.e.: the application reading, writing and mathematics.	For high school graduation	The development of the baseline testing instrument has been awarded to a private test contractor.
Florida	CSSB 340 1975 F.S. 229.814 CSSB 107 1976 F.S. 76.226	State and local boards	Grades 3, 5, 8 and 11	Basic skill areas Functional literacy	For high school graduation, grade promotion and early exit from high school	Titled: The Educational Accountability Act Places ban on social promotion

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Denver, Colorado

November 15, 1977

STATE	ACTION TAKEN	SETTING OF STANDARDS	GRADE LEVELS ASSESSED	SKILL AREAS ASSESSED	USE OF STANDARDS AND TEST	COMMENTS
Georgia	State Board of Education Action	State Board and State Department	Grade 4, 8, & 11.	Grades 4 & 8 Reading, math. social studies and science. H.S. Test under development	The state board of education has not taken final action on the use of the tests	The student assessment program is part of a long-range plan to fund local school districts through a program of comprehensive planning.
Idaho	State Board of Education Resolution	State Board of Education	Grades 9 - 12	Reading, Writing, Arithmetic and Spelling	For high school graduation at the option of local districts	Students passing the proficiency program will receive a diploma with the state board seal. In districts not participating, students will receive district diploma.
Kentucky	1977 State Board of Education adopted 4-yr comptcy.plan	State Department with Task Force Assistance	Grades 3, 5, 8, & 11.	Criterion referenced test in reading, writing, arithmetic	For high school graduation and grade promotion	
Louisiana	HB 810, Act 709 1976	State	Grades 4, 8, and 11.	Basic communication and computational skill areas with criterion referenced test	No mention of graduation or grade promotion	Requirements a part of the accountability and assessment law.

STATE ACTIVITY

MINIMAL COMPETENCY TESTING

Prepared by:
Chris Pipho, Associate Director
Department of Research and Information
Education Commission of the States
Denver, Colorado November 15, 1977

STATE	ACTION TAKEN	SETTING OF STANDARDS	GRADE LEVELS ASSESSED	SKILL AREAS ASSESSED	USE OF STANDARDS AND TEST	COMMENTS
Maine	Enacted amended LD 1810 Ch. 78 of the Private Special Laws	State Department of Education	Grade 11	(See Comments)	For high school graduation	The law specifies that the Commissioner of Education is to be assisted in the development of the assessment instrument and the areas to be tested by a state wide committee. The law names the organizations to be represented.
Maryland	HB 1433, M.A. C., Art.77, Sec. 980 1976 and HB 1462, Ch. 559 - 1977	State Board of Education	Grades 2 - 12 Grades 3, 7, 9 & 11	Reading	For grade promotion and high school graduation	Students not meeting minimum requirements may be retained in some grade or enrolled in remedial program
Michigan	State Department of Education	State Department of Education	Grades 4, 7, 10	Reading and Math	For local district use	12th grade minimal competency test, covering life role skills under study
Missouri	State Board of Education	State Department of Education	Grade 8	The application of reading, mathematics and government/economics skills	No mandate for graduation or grade promotion	The Basic Education Skills test, developed by the Department of Education, has been field tested in grades 8, 10 and 12.

STATE ACTIVITY

MINIMAL COMPETENCY TESTING

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November 15, 1977

STATE	ACTION TAKEN	SETTING OF STANDARDS	GRADE LEVELS ASSESSED	SKILL AREAS ASSESSED	USE OF STANDARDS AND TEST	COMMENTS
Nebraska	State Department of Education	Local School Districts	Begins in Grade 5 and continues until mastery is achieved by each studt. in each skill area	Reading, writing and mathematics	State developed test is not to be used for grade retention or promotion	Local school districts may use the Nebraska Assessment Battery of Essential Learning Skills (N-ABELS) or develop their own test.
Nevada	AB 400-1977	State Board of Education	Grades 6, 9 & 12	Reading, writing and mathematics	For high school graduation	Students may be promoted to the next grade if examination is failed but remedial work is to be provided
New Hampshire	State Department of Education	State Department of Education	Grade 4 Grade 8 & 12 under development	Communications and Mathematics	Grade promotion and high school graduation not mentioned	Program is to serve as guidelines for local school districts
New Jersey	A.1736,Ch.97 1976	State		Reading and mathematics	Student diagnosis and remedial identification	Local districts are to provide remedial assistance in order for students to meet state standards
	State Department of Education	State Department of Education	3, 6, 9 & 11	Reading and mathematics Life skills under study	Identification of students needing instructional assistance.	Development of testing instrument is under contract to a private test development company

STATE ACTIVITY

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New Mexico	State Board of Education	State	Elementary level, grade choice up to local district and grade 10	Elementary: Local option Secondary: Proficiency battery based on adult performance level (APL) and writing sample	Proficiency endorsement on high school diploma if test is passed	The state department of education is working on a series of basic skill area curriculum guides
New York	State Board of Regents	State Board of Regents	Grades 9 - 12	Reading and mathematics with a criterion referenced test; also, civics and citizenship practical science, health & drug education and writing and language skills	For high school graduation	The New York Department of Education also adminsters the Regents Diploma Program and the pupil evaluation plan (PEP) both related to measuring student performance in the basic skill areas.
North Carolina	Enacted HB 204	By Competency Test Commission created by law	Grade 11 beginning in 1978-79	To be determined by the Competency Test Commission. See Comments.	For high school graduation	The test is to measure "those skills and that knowledge thought necessary to enable an individual to function independently and successfully in assuming the responsibilities of citizenship."

(North Carolina continued next page.)

STATE ACTIVITY

MINIMAL COMPETENCY TESTING

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STATE	ACTION TAKEN	SETTING OF STANDARDS	GRADE LEVELS ASSESSED	SKILL AREAS ASSESSED	USE OF STANDARDS AND TEST	COMMENTS
North Carolina (Continued)	Enacted HB 205	By Competency Test Commission (separate from HB 204)	Grades 1 & 2 criterion referenced test Grades 3, 6 & 9 "Norm" referenced test	To be determined by the Competency Test Commission	To be determined by the Competency Test Commission.	
Oregon	State Board of Education 1972	Local Districts	District Option	Reading, writing and computation. Local option for personal development, social responsibility and career development.	For high school graduation	Graduation requirements are based on course credit, attendance and required competencies in personal, social and career areas.
Oklahoma	State Board of Education	Decision will follow baseline data test	Grades 3, 6, 9 --- Grade 12	Reading --- Survival Skills	Decision will follow baseline data test	The baseline test instrument will be given to 15,000 students in the fall of 1977

STATE ACTIVITY

MINIMAL COMPETENCY TESTING

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Rhode Island	State Department of Education		Grades 4, 8 and age 17 used in pilot test	Comprehension Analysis and Evaluation known as the "life skills"	For local district and state department use. Competency base high school diploma under study.	The Rhode Island master plan for evaluation and the statewide assessment program have jointly contributed to the pilot testing in the life skills areas
Tennessee	State Board of Education Nov. 10, 1977	State Department of Education	Grades 11 & 12	Reading, math, grammar and spelling	For high school graduation, Class of 1982	Two different programs were established in the same court ruling.
	State Board of Education Nov. 10, 1977	Local districts	Grades 4, 5, 6 and 8	Subjects at discretion of local district	Remediation	
Utah	State Board of Education January 1977	Local district	Local district	Reading, writing, speaking, listening, arithmetic, democratic governance, consumerism, problem solving	For high school graduation, Class of 1980	Local districts will choose the test and set the cut-off standards.
Vermont	State Board of Education	State Board of Education	Continuous	Reading, writing, speaking, listening, and mathematics. Area of reasoning is under study.	For high school graduation	Mastery of the basic competencies is to be one requirement for graduation unless student has a limiting handicap.

STATE ACTIVITY

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Virginia	State Board of Education ruling	Broad: State Specific: Local	--	Functional literacy in communicative skills--reading, writing and speaking. Computational skills, history and cultures of United States including processes of democratic governance and economic system. Ability to pursue higher education or gain employment.	For high school graduation, Class of 1981, and remediation	It is assumed that local districts will choose grade or grade levels to test. State mandates it be done before graduation.
	HB 256-1976	State Board of Education in cooperation with local districts	All grades yearly with first emphasis in grades K-6.	Reading, communications and mathematics	To measure progress of individual students	Act known as The Standard of Quality Act.

STATE ACTIVITY

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Washington	SB 3026 HB 1345-1976	Local districts	4th and 8th	Standardized achievement test in reading, mathematics and language arts	For school district and parent use	School districts are encouraged to develop a separate test for second grade for the early identification of pupils needing assistance in language and computational skills.
Wyoming	State Board of Education policy	Local districts will establish specific standards	--	Reading, writing and computing with proficiency. Process and structure of democratic governance and free enterprise	For high school graduation	The start-up date and rules and regulations are to be drawn up by the State Department of Education. Local districts will verify the state standards and are encouraged to go beyond the minimum standards set by the State Board of Education.

Appendix D
Minimal Competency Workshops

Panelists and Topical Discussion Leaders

ATLANTA

State and Regional Activities — Problems, Prospects and Programs

Elizabeth Creech, Consultant, State Department of Education, Georgia
Kenneth Loewe, Director of Test Development, State Department of Education, Florida
Joseph Murray, State Representative, South Carolina

Topical Discussions

Setting Standards
Chris Pipho, Associate Director, Department of Research and Information, ECS

Testing
Hal Wilson, Director, Exercise Development, National Assessment of Educational Progress, ECS

Finance
Donald Van Fleet, Director, Research and Planning, Kentucky Department of Education

Instructional Management
Debera Sharpe, Director of Competency Based Education, Georgia Department of Education

Guideline for Minimal Competency
Richard Bossone, Professor, Graduate Center, City University of New York

Teachers
Mrs. Kino Barrowman, Director of Curriculum and Research, Dade County School District, Florida

BOSTON

State and Regional Activities — Problems, Prospects and Programs

Leslie May, Associate Director, Bureau of Research and Assessment, State Department of Education, Massachusetts
Robert R. Ramsey, Jr., Secretary of Education, Virginia
Irene Smith, State Senator, Rhode Island

Topical Discussions

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Arthur E. Wise, Educational Policy Research Institute

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Paula M. Nassif, Projects Director, National Evaluation Systems, Inc.

Guideline for Minimal Competency
Richard Bossone, Professor, Graduate Center, City University of New York

Teachers
Wesley R. Day, President, Maine Teachers Association

DENVER

State and Regional Activities — Problems, Prospects and Programs

Jerry Cavanaugh, Principal, Sherman Elementary School, Denver, Colorado
Jack Faxon, State Senator, Michigan
Milt Lehr, Director, Oklahoma Education Council, Oklahoma City, Oklahoma
Hermes Cervantes, Educational Psychologist, Denver Public Schools, Colorado

Topical Discussions

Setting Standards
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Dr. Leroy Ortgiesen, Administrator, State Instructional Services, Nebraska

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Leroy Green, State Assemblyman and Chairman of Education Committee, California
Robert Segura, Assistant Professor, School of Education, Sacramento State College, California
Kris Van Gorkom, Research Analyst, Senate Education Committee, Washington

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